

# Annual Review 2014



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## About the Syngenta Annual Report

The full print edition of Syngenta's Annual Report 2014 comprises:

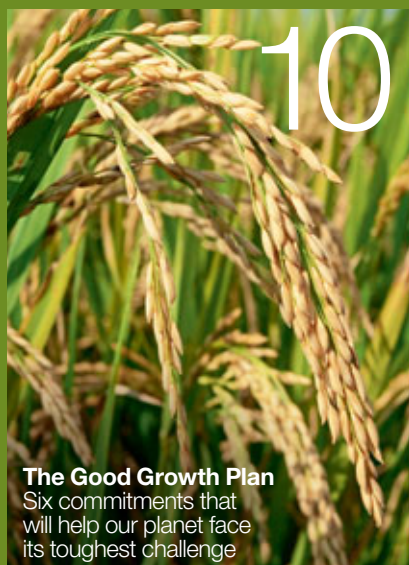
- the Annual Review 2014, summarizing both financial and non-financial performance
- the Financial Report 2014
- the Corporate Governance Report and Compensation Report 2014.

The Annual Review includes quantitative and qualitative information on strategies, policies and actions taken towards our business and corporate responsibility goals.

For further information go to:

- our online Annual Report 2014 including expanded information on our corporate responsibility activities and non-financial performance: [www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)
- our corporate website including the Form 20-F, the Our Industry publication and a section with answers to many "Questions about Syngenta": [www.syngenta.com](http://www.syngenta.com)

The Syngenta Annual Report also serves as our annual Communication on Progress (COP) for the United Nations Global Compact.



#### The Good Growth Plan

Six commitments that will help our planet face its toughest challenge



#### Crops in focus

How we are innovating across technologies and addressing growers' needs



#### Non-financial information

The performance indicators we are using to track our progress on sustainability

## At a glance

### Bringing plant potential to life

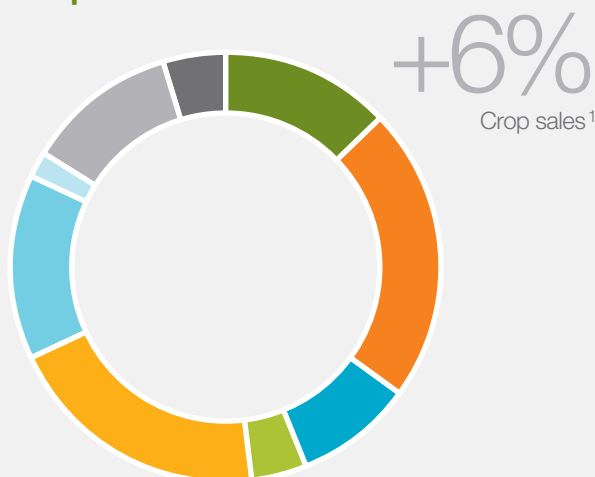
Our business is helping the world's growers to increase crop quality and yields, to feed an ever-growing population. World-class science, deep understanding of growers' needs and continuous innovation have made us one of the world's leading companies.

Now, to help feed an extra 2 billion people by 2050, we've set our sights even higher. Our Good Growth Plan commits us to help grow more food using fewer resources while protecting nature and helping people in rural communities live better lives. And at the same time, we're making our own operations more sustainable.

### Crop performance

We are using our deep understanding of crops to develop fully integrated offers, which increasingly bring together genetics and chemistry.

#### Crop sales



Sales <sup>2</sup> \$m	2014
Cereals	1,943
Corn	3,355
Diverse field crops	1,351
Rice	635
Soybean	3,017
Specialty crops	2,110
Sugar cane	275
Vegetables	1,743
Lawn and Garden	693



Read more about "Crops" on pages 18–29

<sup>1</sup> Growth at constant exchange rates (CER); percentage excludes Lawn and Garden  
<sup>2</sup> Crop sales are based on Syngenta estimates

# Business highlights 2014

Throughout 2014 we continued to strengthen our integrated offers through innovation, acquisition and collaboration. Here are a few highlights from the year.

## New solution for soybean rust

ELATUS™, a breakthrough foliar fungicide, was launched in Brazil.



Read more  
on page 25

## Acquisition: durum wheat seed company

Società Produttori Sementi (PSB), a leader in durum wheat breeding and production.



Read more  
on page 19

## Cellulosic fuel collaboration

Syngenta and Cellulosic Ethanol Technologies, LLC announced CELLERATE™, a revolutionary cellulosic ethanol process technology to increase ethanol plant production.



Read more  
on page 20

## Acquisition: winter wheat and winter oilseed rape

Access to Lantmännen's germplasm, seeds pipeline and commercial varieties, to support development of hybrid cereals worldwide.



Read more  
on pages 19 and 22

## New PLENE® for commercial sugar cane planting

Exclusive licensing agreement with New Energy Farms to develop an innovative planting system for sugar cane in Brazil: CEEDS™.



Read more  
on page 27

## The Good Growth Plan on track

Syngenta has established a global network of 860 reference farms and 2,738 benchmark farms.



Read more  
on pages 10–17

# Our global reach

Our teams around the world combine their local knowledge with our global assets and expertise, tailoring solutions that create value for growers.

90 Countries

111 Production and Supply sites<sup>1</sup>

141 Research and Development sites

29,340 Employees<sup>2</sup>

## Europe, Africa and Middle East

Sales <sup>3</sup> \$m	4,547
Employees <sup>2,4</sup>	13,300
Research and Development sites	50
Production and Supply sites	41

## North America

Sales <sup>3</sup> \$m	3,582
Employees <sup>2</sup>	4,636
Research and Development sites	41
Production and Supply sites	36

## Latin America

Sales <sup>3</sup> \$m	4,279
Employees <sup>2</sup>	4,945
Research and Development sites	14
Production and Supply sites	12

## Asia Pacific

Sales <sup>3</sup> \$m	2,033
Employees <sup>2</sup>	6,459
Research and Development sites	36
Production and Supply sites	22

<sup>1</sup> Includes six multi-functional production sites

<sup>2</sup> Permanent full-time equivalent (FTE) as of September 30, 2014

<sup>3</sup> Excluding Lawn and Garden

<sup>4</sup> Including headquarters (Switzerland)

# Group performance

Syngenta's integrated strategy continues to gain momentum as evidenced by the strong sales growth achieved in 2014. Our focus is now on achieving above-market growth and on driving greater profitability through operational leverage.

## Group sales

\$15.1bn +5% (CER<sup>1</sup>)

2014	15.13
2013	14.69
2012	14.20

## Crop protection sales<sup>2</sup>

\$11.4 bn +6% (CER<sup>1</sup>)

2014	11.38
2013	10.92
2012	10.32

## Earnings per share<sup>3</sup>

\$19.42 +1%

2014	19.42
2013	19.30
2012	22.03

## Research and Development investment

\$1.4 bn +5% (CER<sup>1</sup>)

2014	1.43
2013	1.38
2012	1.26

## Cash flow return on investment<sup>4</sup>

11%

2014	11%
2013	13%
2012	15%

## Seeds sales

\$3.2 bn +2% (CER<sup>1</sup>)

2014	3.16
2013	3.20
2012	3.24

## Dividend per share<sup>5</sup>

CHF 11.00 +10%

2014	11.00
2013	10.00
2012	9.50

## EBITDA

\$2.9bn +7% (CER<sup>1</sup>)

2014	2.93
2013	2.90
2012	3.11

## People trained on safe use

4.7m

2014	4.7
2013	2.8
2012	3.0

## Seed supply farms in Syngenta Fair Labor Program<sup>1</sup>

28,361

2014	28,361
2013	22,895
2012	17,625

## Recordable illness and injury rate<sup>2</sup>

0.37

2014	0.37
2013	0.41
2012	0.39

## Smallholders reached<sup>3</sup>

15.3m

2014	15.3
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<sup>1</sup> Growth at constant exchange rates (CER)

<sup>2</sup> Including sales of Crop Protection products to Seeds

<sup>3</sup> Fully diluted excluding restructuring and impairment

<sup>4</sup> For a definition of cash flow return on investment, see page 50

<sup>5</sup> 2014 dividend is subject to shareholder approval at the Annual General Meeting on April 28, 2015



Read more about "Financial information" on pages 44–50



Read more about "Non-financial information" on pages 51–58



## Measuring our contribution to farming and to the environment



The Board's confidence in the company's financial strength, its people and future prospects is manifested in our recommendation to increase the dividend in line with our progressive policy.

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**Michel Demaré**  
Chairman

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2014 was a year in which both the enormous potential of global agriculture and its innate volatility were clearly visible. The potential was evident in the growth of developed markets such as Western Europe, as well as in developing agricultural markets such as Southeast Asia, where a major step-change in yield is still possible. Volatility in the year was manifested in three areas: weather, particularly in North America; commodity crop prices, with large swings in corn, soybean and wheat; and emerging market currencies, with significant weakness, notably in Russia and Ukraine. Against this challenging backdrop, the company delivered sales growth for the fifth year in a row, and strong cash flow, but the significant headwinds curtailed growth in profits. Newly-launched products such as ELATUS™ have strongly contributed to the resilience of our top line, and I am confident that our late-stage R&D pipeline will continue to deliver growth in the future.

The year also saw significant progress in our Accelerating Operational Leverage program, which aims to deliver a \$1 billion improvement in EBITDA by 2018. The program comprises a number of key projects to obtain greater efficiencies across Commercial, Global Operations and R&D and is central to the delivery of greater shareholder returns in the coming years. I am confident that this program will enable us to deliver profitable growth in the future and make us more agile and resilient to the inevitable challenges and volatilities within our markets.

There were challenges in the area of license to operate during the year. The polarized debate about pollinators and neonicotinoids in Europe, and the contentious issue of the labeling of food containing genetically modified ingredients in the USA were just two which gained significant coverage. The disconnect between urban and rural society continues to pose a threat to the industry's reputation, and is predicated upon beliefs that our products harm human and environmental health and that smallholder

farmers are somehow exploited. In truth, our business is reliant upon healthy ecosystems and thriving rural communities – it would be entirely self-defeating for us to want to damage either. And the company's work is complemented in this regard by the Syngenta Foundation for Sustainable Agriculture, whose primary focus is the smallholder farmer.

Syngenta continued to be active in this debate and to demonstrate our profound contribution to the planet and society. Convincing an often skeptical and entrenched audience will take determination, but I remain confident that we are on the right path. We also moved further along this path by rolling out, during the year, The Good Growth Plan across all 19 of our territories around the world.

2014 was also the first year of measuring our progress against our six commitments in The Good Growth Plan, and to this end we established a global network of around 850 reference farms and 2,700 benchmark farms. Furthermore, the Board of Directors approved the recommendation to take its auditing standards to the level of a full financial audit – making us one of the very few companies in the world in any sector to strive for such rigor.

The Board also had the opportunity to assess the impact both of our integrated strategy and The Good Growth Plan during a visit to Italy, one of the most sophisticated markets for food in the world. Our business in Italy is at the forefront of developing innovative, value-adding partnerships with food companies and retailers. It was clear from our visit that The Good Growth Plan is not only enabling those partnerships, but is also fully embedded in our integrated value offer to customers.

Progress towards The Good Growth Plan goals is just one of the performance metrics set out in the new Executive Committee compensation proposal being submitted to this year's Annual General Meeting,

more details of which can be found in the Compensation Report. The proposal, developed by the Compensation Committee, was reviewed with external advisors and approved by the Board at our December meeting. I am convinced that the framework appropriately incentivizes the executive team with the right drivers, while at the same time, further aligning total compensation with the long-term interests of shareholders.

2014 was also the first full year of the Board of Directors in its current composition. With ten members of eight different nationalities and diverse backgrounds across a variety of industrial sectors, scientific disciplines and professions, it is a very strong and experienced body and well placed to guide the company in the years ahead. I should like to thank my Board colleagues for their insights and constructive criticism throughout the year.

I should also like to thank all our employees for their dedication and hard work, which enabled us to deliver a robust financial and commercial performance in the face of significant challenges. The Board's confidence in the company's financial strength, its people and future prospects is manifested in our recommendation to increase the dividend in line with our progressive policy. Looking ahead, the company is strategically best placed to capture the many opportunities that exist in a dynamic, global agricultural market, and to deliver strong returns for shareholders in the coming years.



**Michel Demaré**  
Chairman

## Focusing on profitability and above-market growth



With the emerging markets now representing more than 50 percent of our sales, managing more volatile conditions has become an integral part of our business. Longer-term our strong position in these countries, where the scope for productivity gains is still immense, underpins our future growth potential.

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**Michael Mack**  
Chief Executive Officer

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The decision to integrate our Crop Protection and Seeds businesses, announced in 2011, was based on a determination to meet the challenges faced by growers. Over the last four years, these challenges have included increased demands from the value chain and regulators, as well as varying weather conditions leading to major fluctuations in yield. In 2014, high levels of production caused a sharp dip in crop prices, creating significant uncertainty with regard to the outlook for farm incomes. This in turn has affected perception of Syngenta's short-term prospects. It does not however alter the longer-term fundamentals of our industry and the imperative of producing more food with finite natural resources.

I am pleased to report that in a difficult market environment we achieved our objective of 6 percent growth in integrated sales at constant exchange rates. This was despite a deliberate reduction in low margin glyphosate. Earnings were only slightly higher than the previous year largely because of an unfavorable impact from currencies, notably those of the CIS countries. We did however mitigate this impact through price increases, and we maintained our strong track record in terms of risk management. With the emerging markets now representing more than 50 percent of our sales, managing more volatile conditions has become an integral part of our business. Longer-term our strong position in these countries, where the scope for productivity gains is still immense, underpins our future growth potential.

Our confidence in achieving this potential has been reinforced by the early successes of the integrated strategy. In most emerging markets, we have gained share in both crop protection and seeds, with tailored crop-based offers accompanied by agronomic advice and services. In developed markets, where technology adoption is already advanced, progress has been slower but the need for complete solutions – for example to address abiotic stress and resistance issues – is undisputed.

We are convinced that the breadth of our portfolio across crops will allow us to resume a trend of share gain in these markets also.

As we enter the next phase of our strategy, our focus is clearly on delivering improved profitability through the Accelerating Operational Leverage program. The comprehensive actions we have announced will enhance both our commercial effectiveness and the power of our innovation. By optimizing our cost structure within the framework of our integrated strategy, we are set to attain industry-leading efficiency.

Innovation will play a key role in enabling us to achieve our objective of profitable above-market growth, as we enter an upturn in the innovation cycle. In 2014, we introduced three new active ingredients of which the most significant was ELATUS™, which had sales of over \$300 million following its launch in Brazil. This was the largest product launch in Syngenta's history, involving more than 1,000 sales people. Their enthusiasm and commitment ensured that the product's advantages, which have been validated by key external researchers, have been widely recognized by our customers.

As we approach the publication of the first data set relating to The Good Growth Plan, we have fulfilled our pledge to continue seeking counsel and guidance from our stakeholders by holding a series of Year One Updates in various cities. At these events, we were able to report on the many projects and crop solutions that are underway in all regions. The dialogue with participants deepened our insight into their concerns, which include smallholders and family farmers, food waste and soil health. There is also growing awareness of the dichotomy between urban consumers and rural growers, which often gives rise to tensions and misunderstanding. We illustrated the dichotomy at the event in Brussels, where we installed a miniature farm with four crops in the city center.

This provided a visually compelling opportunity to engage with town dwellers on the reality of agriculture and to show school children how their food is produced.

Our employees worldwide are fully engaged in The Good Growth Plan. For many, making crops more efficient is inherent in the service they provide to customers or in the scientific research they conduct. Increasingly though, our people are voluntarily expanding their contribution through activities such as the creation of natural habitats on degraded land. Active participation in The Good Growth Plan is bringing the concept of sustainability to life across the company and is heightening awareness of the importance of each individual's work.

At the end of 2014, John Atkin retired as Chief Operating Officer after a formidable 37-year career in agriculture. John played a pivotal role in the creation of Syngenta by successfully merging two Crop Protection businesses to form a clear industry leader, the strength of which is a cornerstone of the integrated strategy. I should like to thank John for his outstanding contribution, and am pleased that in Jon Parr we have found a strong successor on the Executive Committee.

I should also like to thank all our employees worldwide for their energy and dedication at a time of change and challenge. We have established the platforms for bringing distinctive offers to growers more quickly and for achieving a sustained improvement in profitability. These will allow us to work together towards realizing the vast potential of global agriculture.



**Michael Mack**  
Chief Executive Officer

## Our business model

What allows us  
to do what we do

## Financial capital

People and the  
intellectual property  
they createChemical, biological,  
genetic and  
computational  
sciences

## Natural resources

Facilities  
and services

## Local communities



## Laws and regulations



## What we do

Research and  
developmentWorking with others  
and through direct operations

- Scientists and universities
- Research institutions
- Farmers and suppliers
- NGOs
- Agricultural extension services
- Crop protection discovery and innovation
- Advanced seed breeding
- Addressing insect, fungus, weed and environmental stress on crops

## Production



- Active ingredients
- Raw materials
- Intermediates
- Formulation, fill and packaging
- Seed supply farms
- Seed processing
- Lawn and Garden supply chain

## Commercial



- Distributors
- Demonstration farms
- Processors and the food chain
- Agronomists
- Agricultural extension services
- Technology providers
- Product management
- Crop-based offers
- Marketing and distribution

Supporting  
activities

- Stewardship
- Product registration
- Health, Safety, Environment, Quality and Security
- Technology and engineering
- Industry associations
- NGOs and IGOs
- Multi-stakeholder dialogue

## What we create

Products, services and solutions

Agronomic know-how

Crops



- Cereals
- Corn
- Diverse field crops
- Rice
- Soybean
- Specialty crops
- Sugar cane
- Vegetables
- Lawn and Garden

- Herbicides
- Insecticides
- Fungicides
- Seedcare
- Seeds



Products

Integrated solutions for growers

Adjacent technologies



- Nutrients
- Financial services
- Information systems

## The value we provide

Return on investment for growers and shareholders



Food, feed, fuel and fiber



Sustainable intensification of agriculture to provide food security



Grower and customer satisfaction



Sustainable production



Development of our people and partners along the value chain



Economic value shared with employees, suppliers, governments and communities



Collective wellbeing of communities



Stimulating research and sharing knowledge





## Focused on the challenges farmers face

Our crop-focused approach is now deeply embedded in the company and recognized by our customers. By thinking like a grower, we are better able to meet evolving needs worldwide. In emerging markets we are enabling technology adoption, while in developed countries we are helping growers to deal with problems such as weed and insect resistance, as well as an increasingly demanding value chain. As awareness of the need to preserve finite natural resources grows, we are developing solutions that can help to ensure the sustainability of agriculture.

### Integrate

**Create integrated offers in the field supported by agronomic expertise and a deep understanding of grower needs now and in the future**

Syngenta has unrivaled portfolio breadth spanning crop protection, seeds, seed treatment and traits. Our aim is to develop offers that meet differing market requirements and have demonstrable benefits in the field. Environmental, societal and value chain developments have given rise to a plethora of choices and decisions for the farmer. With our expertise, we can help make growing crops simpler and more productive.

### Strategy success factors

The most immediate gains from integration have come through leveraging a combined field force to market a broad portfolio covering multiple crops. Segmentation at the grower level and the reinforcement of strong channel partnerships have been shown to generate market share gains in both Crop Protection and Seeds. Since the launch of the strategy, gains in both businesses have been achieved in territories representing more than 40 percent of group sales.

Seeds are often the grower's first decision point, creating a connection that can lead to a broader awareness of technology. In sunflower, for example, the adoption of crop protection has brought further yield benefits to growers already using our high-value hybrids.

### Our objectives

The benefits of the integrated strategy have been most pronounced in the emerging markets, which are driven by intensification and technology adoption. We have identified the key strategy success factors in these markets and will seek to replicate them more broadly. Importantly, we will build upon a number of new product launches to reinforce our customer relationships and to expand the scope of our integrated solutions.

### Accelerating operational leverage

We are now simplifying our marketing structure to improve both efficiency and our ability to create distinctive new offers. We will upgrade our systems thereby freeing up the sales force to spend more time with customers. This, in turn, will lead to improved demand visibility and better production management. In addition, significant synergies at the global crop level have been identified, to be realized through combining and simplifying management and resources.

### Innovate

**Bring strong new products to market and combine genetics and chemistry to create new solutions and business models**

We maintain a clear focus on bringing strong new products to market. Each of these products offers multiple opportunities for combinations with the existing portfolio and for the creation of integrated solutions.

## Progress in 2014

The successful launch of three new active ingredients attests to the renewed strength of our chemical innovation. ELATUS™ marks a step-change in rust control in Brazil. CLARIVA™, launched in the USA for the control of cyst nematodes, is a further addition to our broad portfolio of biocontrols. And FORTENZA®, specifically developed as a seed treatment, provides control of *Lepidoptera* as well as chewing and sucking pests.

## Our objectives

Research and Development (R&D) is the innovation engine of Syngenta and is crucial to driving growth. We want to maintain a high rate of new product delivery to the end of the decade while investing in targeted early research that will deliver breakthrough innovation post-2020.

Our broad crop knowledge will enable us to maximize the value of our portfolio by applying technologies across crops. By working more efficiently, we can generate greater leverage for every dollar of our R&D investment and deliver a higher throughput of products into the commercial portfolio.

Our strategy is to accelerate the pace of innovation through licensing, partnerships and acquisition. In 2014, we expanded our cereals germplasm through acquisitions and took a major step towards scaling up our PLENE® sugar cane platform through a licensing agreement with New Energy Farms for their CEEDS™ planting system (Crop Expansion Encapsulation and Drilling System).

## Accelerating operational leverage

Actions to increase productivity will include the consolidation of sites, enabling us not only to reduce fixed costs, but also fully to exploit the synergies between chemistry and genetics.

Increased use of outsourcing for standard activities will allow our scientists to focus fully on high-value innovation. A simplified management organization will be focused on strengthening the links with commercial teams in order to ensure that our innovation pipeline is adapted to evolving needs worldwide.

## Outperform

### Our goal is to create value for our shareholders by first creating value for our customers through higher yields and better use of resources

Every day, our customers are measuring the performance of our products in the field. In order to achieve our objective of market share gain, we need consistently to demonstrate the benefits of our portfolio not only to growers, but also to other participants in the value chain. We also need to sustain the flow of innovation and to design new offers that can be delivered at scale.

## Progress in 2014

In 2014, the expansion of our SDHI fungicides, including ELATUS™, illustrated the potential we have to grow market share through innovation combined with marketing excellence. The expansion of HYVIDO® barley in Europe, supported by the Cashback Yield Guarantee, is another leading example, with innovation in seeds creating an expanded crop protection market.

Lower profitability in 2014 meant that our goal of creating value for our shareholders was not met. While we cannot influence currency and weather effects, we are fully committed to resuming a trend of profitable growth and are targeting an EBITDA margin of 24 to 26 percent in 2018.

## Accelerating operational leverage

We are reducing fixed cost overheads by moving some activities to lower-cost locations. Significant procurement and production savings are being targeted, and a more efficient global logistics model is being put in place. In Seeds, efficiency programs in field production and processing are underway. These measures will drive gross margin improvement while continuing our track record of operating cost efficiency.

# Securing our future together

Syngenta's business serves and sustains one of the world's largest industries: agriculture. And today that industry is grappling with one of the toughest challenges on earth – feeding the world's fast-growing population. Each day, the world has an extra 200,000 mouths to feed, and the planet's agricultural resources are already under unprecedented strain. The Good Growth Plan is Syngenta's commitment to help the world's growers rise to that challenge in a sustainable way.

The Good Growth Plan considers: the resource efficiency that must underpin current productivity; the ecosystem resilience necessary to sustain future productivity; and the far-reaching knowledge transfer needed to support and strengthen rural communities. It focuses our attention on smallholders. And its overall mission is to improve the sustainability of agriculture and of our business.

## How did we do in our first year?

We intended our Good Growth Plan targets to be ambitious, and there is no certainty that we will achieve them all.

In 2014, our focus was on securing firm foundations. We established networks of benchmark and reference farms, gathered baseline data and clarified how best to track and verify progress. This process has itself yielded insights of value to our commercial and product development teams.

At the same time, we have created soil management and biodiversity programs to improve agricultural ecosystems. And as we have extended our reach to smallholders, we have brought our customers not only our products, but also access to knowledge, technologies, safe-use training and markets.

In the following pages, we set out the highlights of our work in year one, and our priorities for year two, for each of our six commitments.

## A central part of our strategy

The Good Growth Plan is an integral part of our strategy. It ensures that we focus our business on understanding and meeting our customers' and stakeholders' most pressing needs. And it aims to make Syngenta an indispensable part of the solution, now and for the foreseeable future.

We focus our integrated capabilities on six crucial issues shaping the future sustainability of agriculture, so that we can deliver solutions that are better, more productive, and more beneficial to rural economies.

## Six commitments



**Make crops more efficient**

Page 11



**Empower smallholders**

Page 14



**Rescue more farmland**

Page 12



**Help people stay safe**

Page 15



**Help biodiversity flourish**

Page 13



**Look after every worker**

Page 16





## Make crops more efficient

**Increase the average productivity of the world's major crops by 20 percent without using more land, water or inputs**

### Why does it matter?

The world needs to grow more food in the next 50 years than it has produced in the past 10,000 while using resources far more efficiently. Climate change could make the task even harder.

### How do we aim to do it?

As well as applying our unique breadth of technologies and integrated strategy, we will collaborate with partners. Foremost among these are the growers who work with our products every day. And we will focus particular effort on smallholders, who have the greatest potential to increase productivity and in turn improve their own livelihood.

### What have we done in year one?

To measure our progress, we have developed a network of around 850 reference farms. These growers are working with our field experts to raise productivity and demonstrate what is possible with our solutions across all crops and regions in our key markets. To establish a baseline of what growers are currently able to achieve, we have also recruited a global network of just over 2,700 benchmark farms.

All the data on inputs and outputs is being collected, validated and analyzed by an independent company, Market Probe. Together, we have built data collection tools and developed metrics and operating procedures. These in turn have been independently assessed by PwC. This data-gathering program is unprecedented in both scale and rigor, providing a new resource for our scientists and field experts – and we are augmenting it by seeking out new sources of data from governments and NGOs.

### What are our priorities now?

Initial feedback from participating growers has been encouraging. Over the next year, we will analyze the huge volumes of data collected in 2014. Insights from the analysis will then be used to further refine our programs and help identify implementation gaps.

## Superior quality beans, higher yield

With coffee yields worldwide up to 50 percent below potential, growers are looking to not only improve the efficiency of their crop, but also the sustainability of its production. Our NUCOFFEE® model in Brazil supports growers in the sustainable production of coffee, and ensures the traceability of the product, all while delivering up to 50 percent higher grower revenues.

Recently, the model was extended to smallholders through the NUCOFFEE® SUSTENTIA™ program, which partners with UTZ Certified so that growers can earn their certification based on high standards of cultivation, working conditions and care for people and the environment.



More online:  
[www.goodgrowthplan.com](http://www.goodgrowthplan.com)



## The Good Growth Plan



## Rescue more farmland

**Improve the fertility  
of 10 million hectares  
of farmland on the  
brink of degradation**

### Why does it matter?

Poor farming practices expose soil to wind and rain erosion, leaving millions of hectares infertile. Every year, the world loses enough land to produce 20 million tons of grain,

and some 40 percent of existing farmland is already seriously degraded. Raising awareness of this issue and promoting soil conservation solutions is critical for sustainable agriculture: rebuilding lost fertile soil can take nature hundreds of years.

### How do we aim to do it?

We are helping growers to increase soil fertility and productivity sustainably through conservation tillage, crop rotation, permanent ground cover and improved fertilization, and crop protection strategies that better respond to changes in soil structure. We are working with conservation experts and partners such as the United Nations Convention to Combat Desertification (UNCCD), to share knowledge and reach both growers and policymakers.

### What have we done in year one?

We have designed projects and educational opportunities to help growers work the land in a way that minimizes disruption to soil. For example, crop rotation and changes in the way crops are grown from year to year are enabling them to counteract weeds, diseases and insect problems with less disturbance to the soil; and covering the soil permanently with crop residue or plants can reduce erosion. Together, over time, these techniques improve soil health. They help cut nutrient loss and crop damage, and increase the soil's fertility and ability to store water. In 2014, our programs impacted over 800,000 hectares of soil, mainly in Latin America and Europe.

## CONTIVO® for healthier soil

In Hungary, the combination of record-setting rains and severe droughts had growers looking for ways to protect their soil: too much rain can wash it away – too little can dry it out making it more susceptible to erosion.

Our CONTIVO® system helps growers in Hungary to adopt conservation tillage techniques that leave at least 30 percent of the previous year's crop remnants on the surface of the soil before planting. It combines proven conservation tillage practices with innovative seeds technology, suitable equipment and appropriate use of fertilizer together with crop protection protocols to protect soil health while still maintaining high yields.



More online:  
[www.goodgrowthplan.com](http://www.goodgrowthplan.com)



We have also provided initial funding and support for curriculum creation at the UNCCD Soil Leadership Academy, which began operations in early 2014. The Academy aims to strengthen international policy, decision-making and frameworks for soil conservation and sustainable land management. It is building a network linking research institutes, universities and key decision-makers, and will offer information and training opportunities to policymakers and land users worldwide.

### What are our priorities now?

We are collaborating with external stakeholders – academics, policymakers, and soil experts – to introduce these practices globally. Local managers will assess the best ways to make soil more fertile, select the most promising projects, tailor them to local conditions, and get them underway with local growers.

Once projects have been launched, we need to make sure they're working. We have designed controls to ensure that data is reported in the most accurate way, and we'll continue to seek ways to improve the reporting process.

Annual soil sample audits will track program impact. We'll look at land where main conservation agriculture practices have been put in place and identify which land ultimately benefits from improved practice. Data on the number of growers or stakeholders trained on conservation agriculture and the number of partnerships established with local stakeholders could also help us clarify the social and environmental gains. Projects may also supply data on water stewardship, soil nutrient management and farm machinery pathways.



## Help biodiversity flourish

### Enhance biodiversity on 5 million hectares of farmland

#### Why does it matter?

The sustainability of agriculture relies on biodiversity – for plant breeding, pollination and food diversity.

#### How do we aim to do it?

The biggest opportunity to enhance biodiversity in agricultural landscapes is to increase the quality and the amount of field margin habitat. We are helping growers to create rich habitats on areas such as field margins and buffer zones. Where appropriate, we are promoting reforestation with particular focus on protecting wells and water bodies.

To preserve crop diversity, we are working with conservation groups to conserve crop wild relatives and integrate them into farming practice.



### Restoring stream environments

The Prince Edward Island Stream Restoration Project in Canada supports stream environments and reduces the risk of soil runoff by planting strips of vegetation along the edges of farm properties and waterways.

The project – conducted in partnership with experts from the Kensington North Watersheds Association and the Bedeque Bay Environmental

Management Association – supports farmers in implementing practices that enhance biodiversity and keep the soil where it belongs. Since the program started in 2012, more than 21,000 trees and shrubs have been planted, and more than 40 kilometers of streams restored.



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## The Good Growth Plan

### What have we done in year one?

We have been working with partners across the world to identify priority programs, agree specific program targets and define protocols for implementation.

Our first-year focus was on raising policymakers' and growers' awareness of the role of field margin habitat and evaluating the scalability of the reforestation approach. We have about 50 projects in over 20 countries to assess a variety of environmental and cultural factors. In 2014, these programs impacted nearly 700,000 hectares of agricultural landscape.

Tailoring biodiversity programs to local conditions has deepened our understanding of the impact that simple, pragmatic farming practices can have on landscape quality and resilience. We are demonstrating how environmental management and intensive agriculture can co-exist, and how proactive management of relatively small areas can enhance biodiversity significantly. And our work with genetic conservation experts is revealing opportunities for on-farm conservation of crop wild relatives that are currently excluded from many official conservation programs.

### What are our priorities now?

Building on the success of OPERATION POLLINATOR™ to enhance biodiversity, our multifunctional approach – using field margins and managed forests – integrates protection of natural resources and enhancement of ecosystem services.

Proactive management of uncropped areas on commercial farms is one of the most important ways for growers to take care of their natural capital and the ecosystem services it provides: this approach is well suited to the fragmented farming structures of regions such as Europe and Asia. Managed forests present a viable approach to multifunctional landscapes for large consortia of producers working collectively to secure their water source and future productivity.

Collaborating with many stakeholders, we will continue developing research-based, practical tools and protocols adapted for local conditions and cropping systems. Our experience is showing that early support by partners along the value chain ensures more successful implementation and allows value capture at community level.



## Empower smallholders

### Reach 20 million smallholders and enable them to increase productivity by 50 percent

#### Why does it matter?

Smallholder growers are critical to the world's food security, yet they often face high financial risks and low returns. Every day, 180,000 people leave rural communities to live in cities.

### How do we aim to do it?

Ensuring that farming is a viable and attractive occupation will help rural communities to be more vibrant and productive. Supported by partners such as USAID, we can bring growers the products and know-how to raise productivity and earnings dramatically while preserving the long-term potential of their land. We can also improve profitability through innovative business models, helping them to finance higher-yielding products and reach markets to sell their crops.

We already have strategies for reaching more smallholders. We have partnered with the World Economic Forum's Grow Africa and Grow Asia platforms and continue to seek new partnerships and opportunities to reach smallholders worldwide. In 2012, we committed to invest \$500 million in Africa over 10 years, addressing food security and poverty while helping to make the continent a major world food exporter. Smallholders dominate food production on the continent and are a key target of our investment.

### What have we done in year one?

We already reach 15.3 million smallholders indirectly through sales, most of them in Asia.

Our research has given us a clearer picture of what we need to change in order to achieve our goals, as the issues with the greatest impact on smallholders depend on location. Yield improvement is paramount, but at the same time we must ensure that our agronomy and safety training addresses local needs.

And increasing yields is not the only way to boost growers' livelihoods: while deepening our understanding of how training can raise smallholder productivity, we are also investigating how our business models can contribute. For this we have developed a best-practice measurement framework with the Sustainable Food Lab, a consortium of business, non-profit and public organizations working together to promote sustainability.

In collaboration with the non-profit organization Sustainable Markets Intelligence Center (CIMS), we carried out a pilot impact assessment on our FRIJOLNICA™ program in Nicaragua. CIMS interviewed 110 smallholders in the program and 40 smallholders as a control group, to assess areas such as: access to and adoption of inputs and services; income and profitability; food security; and perceived wellbeing.

We found, for example, that farmers participating in our program are achieving greater net income, and investing more in their farms than the comparison group. Having proven the methodology in 2014, we will now look to expand such assessments to our commercial models. The lessons learned from this, and subsequent research, will enable us better to design market models that aim at improving smallholder livelihoods.

### What are our priorities now?

Our focus in 2015 is on our smallholder reference farms. We are tailoring protocols to enhance smallholders' productivity, and developing our training to help them work more productively and safely. We will further explore whether we need to include more reference farms, and how best to communicate the lessons learned from these farms to other smallholders.

Insights from our benchmark and reference farms will inform the development of products and solutions tailored to meet smallholder needs.



### Harvesting beyond subsistence

About 70 percent of the kidney beans consumed in Central America are produced in Nicaragua, mostly by smallholders on around a hectare of land.

FRIJOLNICA™ was founded in Nicaragua to train smallholders on how to improve yields through better farm practices, such as the use of crop protection products and better soil management.

The program has since expanded its scope to help growers gain access to credit services, which are critical to fueling their businesses. FRIJOLNICA™ has helped growers in the program double their yields, lifting many smallholders out of poverty, and has grown from 300 farmers trained in 2007 to 12,000 farmers in 2014.



More online:  
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### Help people stay safe

**Train 20 million farm workers on labor safety, especially in developing countries**

#### Why does it matter?

We share a responsibility to help improve occupational safety and health in agriculture. This applies particularly to smallholders, especially those in developing countries, who often lack access to guidance on using crop protection efficiently, responsibly and safely.

#### How do we aim to do it?

Agriculture is the world's second largest source of employment, often involving long hours and heavy work in harsh conditions. Our training programs raise awareness of the hazards involved, and share knowledge of how these can be effectively managed and prevented. Each year, we train growers through our sales and stewardship teams, as well as in partnership with local organizations and product retailers.

#### What have we done in year one?

We established baseline data against which to measure our progress and improved the quality of record-keeping and evidence of training activity. In 2014, we reached 4.7 million people – of which 74 percent are smallholders – with dedicated safety training programs or as part of our commercial activities including a section devoted to safe use.

## The Good Growth Plan



## Look after every worker

**Strive for fair labor conditions throughout our entire supply chain network**

### Why does it matter?

We recognize a responsibility to ensure that our supply chain meets the highest ethical standards, especially in developing countries. Offering workers fair and attractive conditions will also help agriculture to stem the population drift to cities that currently undermines efforts to increase production.

### How do we aim to do it?

Labor standards are a priority concern for all our operations, both on farms and in production plants, and we expect the same of our suppliers. We have strict contractual requirements – prohibiting the use of child labor, for example – and encourage suppliers to meet our standards through intensive training, periodic assessments and financial incentives.

Since 2004, we have been working with the Fair Labor Association (FLA) to address labor standards on seed farms including: child labor; health and safety; awareness of workers' rights; wages and benefits; hours of work; harassment; abuse; and discrimination. Our labor standards program now includes more than 28,000 suppliers in India, Eastern Europe, and Latin America, and we are on track to include all our suppliers by 2020.

## Using crop protection safely

In the Jessore region of Bangladesh, Syngenta representatives have been using their sales visits with smallholders as opportunities to train them on the safe use of crop protection products.

With each sales pitch, a portion of the dialogue is focused on the "5 Golden Rules" of safe use of crop protection.

As a result, we're able to train more smallholders on how to stay safe while supporting them to increase crop productivity. We're now formalizing this approach in order to replicate it across the region.



More online:  
[www.goodgrowthplan.com](http://www.goodgrowthplan.com)

Working with external partners, we have been refining our training programs and concepts – drawing on the insights we are gaining from our research into smallholders and analyses from our reference farms. We have also begun addressing labor safety more actively through the sales force.

## What are our priorities now?

We are working with our partners to ensure that all our training is high quality and leads to measurable impacts on attitudes, knowledge and behavior – with a special focus on smallholders. We are also working to form new partnerships with a growing number of organizations. An important lesson from 2014 is that in training the trainers, we need greater emphasis on teaching knowledge transfer techniques as well as course content.



## What have we done in year one?

Our program now has tailored approaches for our seed supply farms, flowers farms and chemicals suppliers to meet safety and social goals.

In 2014, we extended our seeds supplier program to the Philippines: it now covers just over half of the 50,000 supply farms. The FLA conducts independent audits and verifies the number of growers participating in the program, and we are now working towards having it accredited by the FLA.

We also launched a program to certify our flowers farms to the standard developed by Global Good Agricultural Practice (Global GAP) to assess farm workers' health, safety, and welfare.

Chemical suppliers play a critical role in our ability to meet demand, and an important part of our relationship with them is to ensure they meet high standards on health, safety, and labor conditions. Health and safety standards are tracked through our supplier assessment program. Building on our experience in developing common standards for the chemical industry, we have partnered with the China Crop Protection Industry Association to sponsor and contribute to industry health and safety workshops in China. We also started a long-term initiative with our key Asian chemical suppliers to develop and implement best practice in process safety management.

In 2014, we completed a sustainability assessment across our direct and indirect supply markets to identify priorities and review our assessment protocol for labor practices.



## Leading by example

Twenty years ago, Renukamma Umapathi and her family worked their fields in India, and yet the earnings were not enough to pay school fees for her children.

To boost her family's income, she converted part of the land to seed production for Syngenta. In 2006, she participated in a training program initiated by Syngenta and the Fair Labor

Association on the eradication of child labor, workers' rights, and issues of health and safety. Since then, her children have graduated and her business has grown. Renukamma is now a trusted employer in her community, who motivates others to adopt standards of fair labor and safety.



More online:  
[www.goodgrowthplan.com](http://www.goodgrowthplan.com)

## What are our priorities now?

Building on our experience from working together with the FLA and other companies to raise seed supply chain standards, we will now work with other chemical manufacturers and our suppliers on an engagement program that assesses and improves chemical sustainability sourcing practices, including environmental and social aspects.

We will further develop our supplier assessment process to include labor practices and will look for further opportunities to develop health and safety initiatives and partnerships within the chemical industry. We will also define

and set clear targets for assessment of health and safety, environment and labor conditions in our supply chain and track progress against them.

## Measuring The Good Growth Plan

Read more about how we are measuring The Good Growth Plan in the "Non-financial information" section on pages 52–54. You can also find more data and discussion on [www.goodgrowthplan.com](http://www.goodgrowthplan.com)

# Transforming the productivity of farms large and small

To transform farm productivity, we need to see the world the way growers see it: crop by crop. By understanding growers' challenges and needs more deeply, we're finding new ways of applying and combining technologies to make a real difference to crop yields, quality, and resource efficiency on farms of every size.

All crop sales in this section are based on Syngenta estimates.

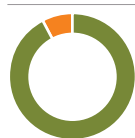
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## Cereals

Sales \$m

\$1,943m



Crop Protection	1,781
Seeds	162

### Current portfolio highlights

Leading seeds business: wheat, conventional and hybrid barley

Integrated growing systems, variety-specific protocols: optimizing yield and quality delivery

SDHI fungicide technology: SEGURIS®, BONTIMA®

### Pipeline highlights

	Year of launch
SOLATENOL™: new broad spectrum fungicide	2016
New broadleaf herbicide mixture	2017
Hybrid wheat: biotic, abiotic traits	2020+

Cereals are the world's largest crop by acreage and the largest food crop. They are grown in more than 120 countries worldwide due to their agronomic adaptability and central role in our diet.

With a leading seeds footprint and crop protection portfolio, breeding programs, and agronomic services, Syngenta is uniquely placed to address the challenges faced by wheat and barley growers. We are bringing farmers integrated and compelling offers that help deliver grains of superior quality, responding to the demands of other customers in the value chain including food companies, pasta makers, brewers, maltsters and others.

Highlights for 2014 include sales growth of 67 percent (CER) for our SDHI fungicides SEGURIS® OPTI for wheat and BONTIMA® for barley. These products are now expanding their geographical presence across Europe. Our SDHI seed treatment, VIBRANCE® has seen an acceleration of sales, and launches are planned in additional markets such as Germany in 2016. We are also targeting SOLATENOL™ launches in early 2016 for cereals in Europe and North America.

We continued to develop hybrid wheat building on our strong global wheat platform and our experience with hybrid barley. We expect to make hybrid wheat varieties available to growers in some key markets within a decade.

## Protecting the grower's investment

HYVIDO® is a high-performing hybrid barley with better rooting and stress resistance than conventional barley.

In 2014, we introduced an integrated offer to ensure the grower's investment in our premium-price seeds: the Cashback Yield Guarantee powered by HYVIDO®. If HYVIDO® fails to deliver more than 0.5 t/ha yield versus conventional barley, Syngenta will pay back the price difference.

The offer was launched on a total of 25,000 hectares in France and the UK. Today, the difference between HYVIDO® and conventional barley is there for all to see, with an average yield increase of 10 percent as well as more consistent yields overall.



## Soft and durum wheat

Syngenta is already the leading global seeds supplier for conventional wheat, malting barley and hybrid barley. In 2014, we took an important step to expand our wheat germplasm base further, by acquiring the winter wheat business of Lantmännen SW Seed in Germany.

In order to complement our seeds portfolio with competitive durum wheat material, we also acquired Società Produttori Sementi (PSB) in Italy. By combining PSB's unrivaled durum wheat breeding expertise with Syngenta's leading-edge cereals research and development and technologies, we will help more growers around the world sustainably to meet increasing food industry demand for high-quality pasta production.

## Feed barley and malting barley

In 2014, our hybrid barley HYVIDO® seeds achieved \$65 million in sales, up 70 percent from 2013. Since the 'Cashback Yield Guarantee powered by HYVIDO®' was first launched in France and in the UK in 2014, 25,000 hectares have been signed into the offer, in spite of a premium positioning in a low commodity price environment. On these farms, Syngenta achieved significant market share growth in fungicides and plant growth regulators. The Cashback Yield Guarantee was extended to Germany and Belgium in the fall of 2014, and HYVIDO® was also successfully launched in Spain.

Syngenta also announced a malting barley collaboration with Anheuser-Busch InBev for Argentina, with the potential to be scaled to many other markets due to the global reach of both companies. We have leveraged our knowledge and leadership in this crop to introduce a new variety in Argentina, combined with a protocol that includes training and agronomic advice to help growers meet Anheuser-Busch InBev's supply demands by delivering more yield and better grain quality.



## Crops in focus

## Corn

Sales \$m

\$3,355 m



Crop Protection	2,215
Seeds	1,140

## Current portfolio highlights

Water optimization native trait:  
AGRISURE ARTESIAN®

ENOGEN® corn offer

Integrated insect and weed  
resistance management solutions

## Pipeline highlights

	Year of launch
ACURON™: new active ingredient for enhanced weed control	2015
New broad spectrum fungicide	2018
Water optimization native trait: 2nd generation AGRISURE ARTESIAN®	2019

Corn is the most widely produced crop in the world, and is also Syngenta's largest single crop. Demand for corn is driven by global meat consumption and production of bio-ethanol in the USA. Growers face challenges such as increasing pest pressures, unpredictable environmental conditions and variable commodity prices.

Although in 2014 a lower corn price resulted in reduced plantings, we continued to build on our strong foundation of genetics, traits and crop protection. By strengthening our complete offering and building partnerships, Syngenta is delivering innovative and differentiated solutions that raise yields and reduce crop losses, improve water efficiency and make ethanol production more sustainable.

## Changing the game for energy

With ENOGEN®, which expresses alpha-amylase enzymes directly in corn, Syngenta is making ethanol production more efficient, cost effective and better for the environment. There are now over 100,000 acres planted with ENOGEN® corn, up from 5,000 acres in 2011.

In 2014, Syngenta launched CELLERATE™ in collaboration with Cellulosic Ethanol Technologies. CELLERATE™ uses ENOGEN® corn enzyme technology to convert corn kernel fibers to cellulosic ethanol, and has been certified by the US Environmental Protection Agency as a cellulosic ethanol source for Renewable Identification Numbers (RINs) under the Renewable Fuels Standard. CELLERATE™ has the potential to create two billion gallons of cellulosic ethanol, without using any more corn.

## Optimizing water use

With our unique AGRISURE ARTESIAN® technology and Water+ Intelligent Irrigation platform, Syngenta is at the forefront of water optimization in corn, helping growers reduce the amount of water they use.

AGRISURE ARTESIAN® technology helps mitigate risk during dry periods and provides growers with a new level of season-long drought protection. In 2014, 1 million acres were planted with AGRISURE ARTESIAN® hybrids in North America. We also launched HYDRO, the first AGRISURE ARTESIAN® hybrid in Italy and Iberia, selling three times more than usual for hybrid launch events.

Our Water+ Intelligent Irrigation platform – in partnership with Lindsay Corporation – represents a complete solution combining top-performing crop inputs, agronomic expertise and state-of-the-art technology while reducing water use.

## Managing insects and weeds

Syngenta's broad crop protection and genetically modified traits portfolio provides growers with comprehensive solutions to manage insect and weed pressures effectively. As standard practices and stand-alone products are increasingly unable to address these challenges, Syngenta focuses on offering multiple modes of action.

Weed control mixtures such as LUMAX® EZ, LEXAR® EZ, HALEX® GT and ELUMIS® enable growers conveniently and reliably to control an increasing array of weeds resistant to many herbicides.

To combat devastating corn rootworm pests, Syngenta combines traits with seed treatment and FORCE® soil insecticide while promoting insect resistance management practices including crop rotation. In 2014, our offer was expanded with the launch of the AGRISURE DURACADE® trait.

With regard to above-the-ground pests, the AGRISURE VIPTERA® trait has demonstrated major benefits for growers, preventing significant yield and grain quality losses resulting from a broad spectrum of *Lepidopteran* pests. In 2014, US sales of corn seed containing AGRISURE VIPTERA® continued to represent around 30 percent of the total.

### Successful local solutions

In Brazil, Syngenta's Grano Top solution integrates a unique platform of products and services to help growers deliver better quality grain for the poultry and pork industry. Participating farmers achieve a guaranteed premium price.

In Asia, the Start Right solution combines products, protocols and knowledge-sharing to help ensure best establishment of the crop, especially during the critical 'first 45 days'. Smallholder growers are experiencing yield improvements of over 10 percent.

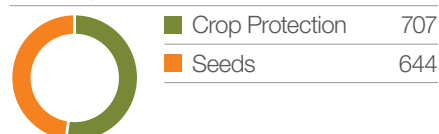
In the USA, our Ethanol Grain Quality solution raises growers' corn yields and drives grain quality for ethanol plants via insect control, early-season weed control, glyphosate weed resistance management and crop enhancement.

In Africa, we are continuing to explore opportunities for the white corn market since our acquisition of MRI Seed Zambia Ltd. We are building our business to provide locally-tailored integrated solutions, including seeds, seed treatment, and crop protection.

## Diverse field crops

Sales \$m

\$1,351 m



### Current portfolio highlights

High-value hybrids: NK®, SYNGENTA®, SPS®, MARIBO®, HILLESÖG®

Integrated sunflower weed control system: native trait, LISTEGO®, CAPTORA®

Enhanced root health: VIBRANCE®

### Pipeline highlights

	Year of launch
New launches:	
AMISTAR TOP®, CLARIVA™	2018
Total control solutions: broomrape, nematodes, <i>Rhizoctonia</i>	2019
Next generation herbicide tolerance	2020+

Sunflower, oilseed rape and sugar beet are the most important among Diverse field crops, with demand driven by food requirements, industrial applications and biofuel. Productivity varies significantly from country to country, and there is room for growth through technological intensification.

## Sunflower

Record sunflower oil production in 2014 and lower prices for all vegetable oils in 2014 affected market dynamics despite the continued demand for healthier oils. Acreage declined in Argentina and South East Europe, but increased in other countries, such as Turkey. In Russia and Ukraine, the largest sunflower growing countries by acreage, the area remained constant despite political and economic instability.

One of the main threats for sunflower growers is broomrape, a parasitic weed, which depletes the crop of nutrients and water. We believe that the best way to address broomrape is by taking an integrated approach, through combining multiple modes of action. This approach includes broomrape-resistant genetics, which also have tolerance to the imidazolinone (IMI) herbicide class. In 2014, Syngenta launched IMI herbicides LISTEGO® and CAPTORA® throughout Europe. In addition to genetics and chemical control, it is important that growers follow agronomic practices such as crop rotation and no- or minimum-till planting, which also have beneficial effects against broomrape.

## Crops in focus



## Center of Excellence to combat broomrape

The team at our Broomrape Center of Excellence in Stein, Switzerland, tracks the occurrence of new species, works on the development of alternative chemical controls, and tests them together with sunflower varieties that naturally contain the broomrape

resistance genes. The Center works closely with customers, informing them about the options for tackling broomrape, and collecting growers' feedback on current offers.

## Oilseed rape

While the total area of oilseed rape and canola remained constant in 2014, there was significant growth in winter oilseed rape due to higher export demand to countries such as Pakistan and Turkey. European growers, however, reported crop damage following the restrictions imposed by the European Union on the use of CRUISER®, a neonicotinoid insecticide seed treatment. High levels of insect damage were reported in Germany and the United Kingdom, making the crop more vulnerable to frost.

Syngenta's 2014 acquisition of the winter wheat and winter oilseed rape breeding and business operations of Lantmännen SW Seed in Germany and Poland, provides access to high-quality germplasm, a seeds pipeline and commercial varieties. As the winter oilseed rape seed market moves to hybrids, this acquisition strengthens our breeding program and genetic pools, enabling the development of highly-competitive hybrids with yield stability and winter hardiness as well as broader disease resistance.

A notable launch in 2014 was SYMETRA® in Germany. A fungicide specifically designed to eliminate *Sclerotinia* and *Alternaria*, SYMETRA® is composed of two active ingredients: isopyrazam and azoxystrobin.

Also in 2014, we introduced our first glyphosate-tolerant canola seeds varieties in Canada. SY4157 and SY4114 are high-yielding varieties with strong agronomic performance and built-in disease resistance.

## Sugar beet

Although sales in 2014 were affected by seed performance issues in the USA, Syngenta continues to expand the range of technologies available. In order to provide 'total nematode control', we are introducing CLARIVA™, a breakthrough biological nematode seed treatment based on natural soil bacteria, for the 2014/2015 season in the USA. CLARIVA™ will form part of an integrated solution with seeds, seed treatment and optimized agronomic practices, which will help stabilize yields across a range of growing conditions. By using multiple modes of action, growers can slow down the build-up of resistance to these innovative technologies.

Another key threat to the profitability of sugar beet growers is *Rhizoctonia* infection, which impacts all crop stages, including post-harvest. Our expertise and wide portfolio have been integrated into a solution comprising genetics, foliar chemistry and, as of the 2015 planting season in the USA, the seed treatment VIBRANCE®. This market introduction will be followed by launches in Europe post 2016.

With the announcement of the elimination of sugar quotas in the European Union in 2017, leading producer countries are taking measures to maintain their competitiveness in sugar beet. Some countries have already decided to continue their support of sugar beet post-2017 through subsidies.



## Rice

Sales \$m

\$635 m



■ Crop Protection 619  
■ Seeds 16

### Current portfolio highlights

GROMORE™: expanding crop protection technology footprint

TEGRA® technology

Leading native trait for bacterial leaf blight

### Pipeline highlights

	Year of launch
Introduction of 2-line hybrids	2018
Elite parental lines, introduction of yield and quality traits	2018
New native trait introductions: brown plant hopper, rice blast, false smut	2018+

Rice is the largest single source of calories for many of the poorest people in the world, especially in Asia. It is also a source of livelihood for almost a billion people, ranging from rice farmers to many others further down the value chain. With rice regarded as the most important crop for food security in most Asian countries, many governments have tried to achieve rice self-sufficiency through policy interventions.

However, at a mere 1.5 percent per annum, the current rate of productivity improvement in rice is not keeping pace with rising demand. At the same time, the availability of water for this water-intensive crop is diminishing, and urbanization means that the competition for land and labor is increasing.

To meet these challenges, a comprehensive approach is required. Syngenta continues to provide the best technology to help rice farmers improve their productivity and ultimately their return on investment. We help to build a foundation of good agronomic practices that take into account the impact of rice farming on the environment. Farmers gain access to a suite of technologies including seed, seed treatment, and crop protection, enabling them to realize the full potential of their crop.

One of our flagship rice solutions is GROMORE™, which provides simple and step-by-step protocols to deliver consistent results in each crop phase. GROMORE™ sets a strong yield potential in the first 60 days and then protects the crop from insects and diseases in the last 60 days, enhancing grain quality. This solution has been demonstrated through an established system of lead farmer networks and is now being scaled up across Asia.

## Addressing labor shortages

Traditionally, rice has required a significant amount of manual labor. With increasing urbanization and a relative decline in rural populations, labor cost and availability have become major concerns to rice farmers.

Technification alleviates labor concerns and brings increased convenience and crop quality. TEGRA®, a fully integrated crop solution, provides growers with high-quality seedlings, which can be transplanted directly into the field through a mechanical planting process. The rice plants are then treated with GROMORE™ protocols to further enhance yield.

## Opportunities for extended germplasm

With the integration of Devgen, acquired in 2012, Syngenta is now well placed to compete in the hybrid rice seeds market. The low level of hybridization in most Asian countries offers a significant opportunity for our expanded germplasm base. With our wide range of genetics, we have established a good foundation for future growth.

In Asia Pacific, sales of rice increased reflecting sales from the Devgen acquisition as well as expansion in India. Our crop protection footprint in Asia continued to expand with the launch of CHESS® for brown plant hopper and TASPA™ for sheath blight in India, and NEWTEC® for rice blast in China. Flagship brands such as ARMURE®, AMISTAR® and VIRTAKO® also reinforced their presence.

Syngenta is committed to bringing the best technologies available to market in order to sustainably increase yields and to improve the lives of rice farmers around the world.

## Crops in focus

## Soybean

Sales \$m

\$3,017 m



Crop Protection	2,492
Seeds	525

## Current portfolio highlights

ELATUS™: market-leading soybean rust control

Elite varieties with herbicide-tolerance and insect-resistance traits

Broad portfolio for weed resistance and early weed management

## Pipeline highlights

Year of launch

Integrated nematode solution, including CLARIVA™ and multiple resistance genes	2015
Stress tolerant genetics	2016
Next generation trait: multiple herbicide tolerance	2018

Soybeans produce more protein per hectare than any other crop and more than many animal products. Three countries – USA, Brazil and Argentina – account for over 90 percent of global production. Soybean is mostly found in animal feed, but it is also present in our daily diet in the form of oil, flour, meat and dairy alternatives, as well as being used to produce biofuels.

In 2014, soybean production achieved a record level of around 310 million tonnes, a 9 percent increase over the prior year.



## Innovation on the fast track

Soy rust, a highly destructive fungus, is one of the biggest threats to farmers in Latin America in particular. And, as resistance to established fungicides is a growing concern, finding a solution was urgent.

Syngenta rose to the challenge, with the fast-track development, formulation, registration and market introduction of the new active

ingredient SOLATENOL™. Binding tightly to the plant leaves, its innovative chemistry provides broad-spectrum, long-lasting disease control.

Successfully launched for soy in Brazil in 2014 under the ELATUS™ brand, SOLATENOL™ is expected to receive registrations for a number of crops and geographies in 2015, including corn, wheat and potatoes in the USA.

## Accelerating our crop protection offer

Growers continue to be faced with a range of challenges, including diseases and pests. Syngenta offers an unrivaled and innovative portfolio of crop protection products, increasingly incorporated into integrated solutions, which differentiate our offer and improve return on investment for the grower.

Efficient weed control is essential to ensure strong plants and maximum water and nutrient uptake from the soil. However, increasing glyphosate resistance is resulting in a more complex weed management challenge. We are leading the market in establishing the importance of sustainable early-season weed management, using formulations containing non-selective herbicides alongside selective herbicides such as PREFIX® and BOUNDARY® in the USA, and FLEX® and DUAL GOLD® in Argentina.

Soybean nematodes, which are hard to detect in the soil, cause production losses of over \$3 billion per year. In addition to AVICTA® COMPLETE for broad spectrum control, we have now launched CLARIVA™ COMPLETE in the USA for biological control of cyst nematodes. In Argentina, FORTENZA® DUO has been specifically developed as a seed treatment to control *Lepidoptera* as well as chewing and sucking pests.

In many parts of Latin America, the tropical climate makes disease control a top priority for growers. We have confirmed our leading position in the control of soybean rust with the launch of ELATUS™, resulting in sales in Brazil of over \$300 million. This new chemistry further expands our integrated offer, which also includes PRIORI XTRA®, rust-tolerant genetics and seed treatment. This approach sets a new standard for sustainable disease control.

We also provide a full range of insect management solutions adapted to the pest spectrum in different markets. In Brazil, we have developed an integrated program with ENGEO® PLENO to manage increasing stinkbug attacks. In response to the growing pressure from the *Helicoverpa* caterpillar, we have developed AMPLIGO® and CURYOM®. In the USA, the AMS APHID MANAGEMENT SYSTEM™ combines an aphid-resistant native trait with CRUISERMAXX® seed treatment and WARRIOR® II crop protection to prevent aphid damage, which can result in up to 50 percent yield loss.

## Seeds: the grower's first choice

Growers are benefiting from our diverse genetic pool, combined with leading genetically modified traits, through the launch of more than 50 soybean varieties under our NK®, SPS® and SYNGENTA® brands.

Our global development program, for example, has demonstrated outperformance against Sudden Death Syndrome (SDS), a devastating soil-borne disease in soybean. Our varieties with SDS tolerance have created a new standard in the USA, and delivered gains of around 10 bags per hectare.

## Expanding the scope of our technology

INTEGRARE™ is our high-yield solution for Brazil, which combines a full season portfolio offer including seeds, seed treatment and crop protection products with optimized protocols, together with a choice of unique agronomy and yield assurance. In 2014, we scaled-up the program to commercial levels, enabling growers to unlock full yield potential with better input efficiency.

QUANTIS® has reached a leading position in the foliar nutrient segment, generating proven return of more than three bags per hectare. And an example of one of our recent technologies for more efficient water and nutrient uptake is the seed treatment VIBRANCE®.

## Specialty crops

Sales \$m

\$2,110m



Crop Protection	2,105
Seeds	5

### Current portfolio highlights

Broad crop protection technology footprint and breadth

Recent launches: ELATUS™, REFLECT®, DYNALI®, AMPLIGO®, DURIVO®, VIBRANCE®

Commercial ramp-up of sustainability-based solutions

### Pipeline highlights

	Year of launch
Innovative cyantraniliprole insecticide and seed treatment mixtures: sucking pests	2016
Integrated potato offer in emerging markets	2016
New fungicides: oxathiapiprolin and broad spectrum fungicide	2016–2018

Our Specialty crops business covers over 40 diverse, high-value crops grown around the world. Four crop groups account for around 80 percent of total sales: potatoes, cotton, fruits and plantation crops such as bananas.

Growth prospects are particularly strong in the emerging markets, driven by three main factors: shifting dietary preferences; changes in climatic conditions; and increased trade in both processed and fresh produce. In developed markets, positive trends relate to an increase in market access and strong product introductions.



## Crops in focus

Our strategy is based on enabling growers to manage complexity so that they can concentrate on growing the highest-quality crops. We do this by leveraging our blockbuster chemistry as well as developing compelling integrated offers.

### Potatoes: gaining market share in emerging and developed markets

In 2014, Syngenta continued to demonstrate the benefits and superior crop performance of our full portfolio of crop protection solutions and services in markets such as China.

Our Potato Healthy Tubers offer enables growers to deliver higher marketable yields by combining quality seed and growing

protocols, including mechanical planting, with leading seed treatment and crop protection products. Potato Healthy Tubers can help Chinese growers increase yields by at least 30 percent and earn a 3:1 return on their investment.

In Europe, the fungicide REVUS® has enabled product combinations that allow growers to manage severe late blight pressure. This was confirmed by independent data generated by EuroBlight, a network of independent scientists, which once again ranked REVUS® and its combination products as the leading solutions for control of this devastating disease.

### Fruits: integrated solutions delivering value to growers

Changing regulatory and food chain requirements make it increasingly complex for fruit growers to access profitable markets for their produce. We address this challenge through the Fruit Quality Contract program, which provides market access guidance and tailored crop protection protocols. To date, the Fruit Quality Contract has been applied to more than 10,000 hectares of wine grapes, pome and stone fruit.

In 2014, the Fruit Quality Contract business increased ten-fold over the previous year. A high level of repeat business shows strong market confidence in the program.

The focus for 2015 will be on reaching new markets and additional crops so that we can continue to help growers produce the highest-quality products.

### Cotton: improving business through technical expertise

In cotton, we are underpinning growth in the business through the FAST START PERFORMANCE™ (FSP) program, which in India is bringing about a step-up in agronomic knowledge among growers.

FSP is a new solution that improves early crop establishment, ensures strong plant growth and delivers greater yields and quality, resulting in increased grower satisfaction and profitability. To date, FSP has been adopted by over 3,500 growers in India and results show yield increase in excess of 20 percent. Higher cotton fiber quality has also been demonstrated.

FSP has also enabled the introduction of more crop protection solutions including ALIKA® and ACTARA®, applied in the initial growth phase, and ISABION®, applied through each stage of the cotton growing cycle.

In 2015, FSP will be introduced in other cotton-growing areas of India, as well as in the USA.



### Closing the potato yield gap

While China is the world's leading potato producer in volume, yields still lag behind. One reason is the insufficient access to healthy seed potatoes. Most growers use farm-saved potatoes, which allow diseases already present in the potato plants to be passed on and to accumulate, leading to significant yield drops.

Syngenta's Potato Healthy Tuber project is set to overcome this challenge, supplying growers with healthy, uniform seed potatoes that are coated with our Seedcare products for strong crop establishment. Along with targeted crop protection solutions and agronomic protocols, the offer not only improves yields, it also saves labor costs, increasing the return on investment even more.

## Sugar cane

Sales \$m

\$275 m



■ Crop Protection 275  
■ Seeds 0

### Current portfolio highlights

Unique chemical solutions for biotic stress: MODDUS®, CALLISTO®, ACTARA®

Integrated fields

Nursery solution: PLENE® EVOLVE™, PLENE® PB

### Pipeline highlights

	Year of launch
Commercial planting: new PLENE®	2017
Launch of proprietary genetics	2019
GM traits for herbicide and insect resistance	2025+

While worldwide consumption of sugar continues to rise, sugar cane is also in demand as a feedstock for producing ethanol. This is blended with gasoline as vehicle fuel – particularly in Brazil, the world's leading sugar cane producer. Feedstock for bioplastics is another growth market, and sugar mills increasingly use cane residue for renewable power generation.

Currently, average sugar cane yields are 66 tons per hectare, but there is the potential to reach as much as 200 tons in the first year of growth. Improving yield is essential as the area of cultivation is limited: sugar cane only grows within 30 degrees of the equator and requires a substantial water supply.

Our 'integrated fields' strategy offers producers a complete portfolio of solutions from seedlings to harvest. In 2014, we launched two new technologies. PLENE® PB introduced high-quality genetics in a pre-germinated bud to accelerate nursery expansion, leading to a 15 percent increase in tons per hectare. PLENE® PB can also be used to fill the gaps that occur in 20 percent of Brazilian fields, leading to significant yield loss. PLENE® EVOLVE™ introduced new varieties with high-quality genetics in a young plant offer.

### Taking PLENE® to the next level

In 2014, we announced an important milestone for the PLENE® seedlings in Brazil. Through an exclusive licensing agreement with New Energy Farms, Syngenta will develop an innovative sugar cane planting system: CEEDS™ (Crop Expansion Encapsulation and Drilling System).

The new PLENE® offer will be based on high-quality encapsulated plant tissue produced in a controlled environment at our Itápolis biofactory in Brazil. It offers a step-change in sugar cane planting in terms of speed and quality, with a higher multiplication rate and lower cost per ton compared with conventional planting systems. The target market is the two million hectares planted annually in Brazil, with commercialization starting in 2017.

### Crop protection: our offers to help improve productivity

In the past, sugar cane growers in Brazil relied on burning to keep pests under control. With the phasing out of this practice, the use of crop protection has become a necessity. Our crop protection portfolio offers solutions that combat weed, disease and insect threats, as well as improving plant quality. Products such as MODDUS®, PRIORI XTRA®, CALLISTO® and ACTARA® enable producers to deliver superior results, combining pest control, plant vigor and higher sugar levels at harvest time.

During 2014, we demonstrated the efficiency of new integrated solutions by applying our crop protection technology in commercial-size test cane fields in Brazil. Protocols combining high-quality seedlings with crop protection solutions used throughout the plant development cycle showed a 10 percent average increase in productivity.

Although 2014 was a challenging year in terms of weather, sugar prices, and constraints on Brazilian's ethanol industry, we have continued to scale-up our planting solutions platform. We are addressing producers' need for high-quality plants that enable better productivity and are giving them the tools to protect and enhance yield.

## Crops in focus

## Vegetables

Sales \$m

\$1,743m



Crop Protection	1,080
Seeds	663

## Current portfolio highlights

Innovative cyantraniliprole insecticide and seed treatment mixtures: sucking pests

Broad seeds portfolio with leading native traits: leafy and fruity vegetables, brassicas

Commercial ramp-up of MAXVEG™ integrated smallholder offer

## Pipeline highlights

Year of launch

New fungicides: oxathiapiprolin and broad spectrum fungicide	2016–2018
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Abiotic, biotic and output traits: native trait insect resistance	2016+
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Expanding emerging market seeds portfolio for hot pepper and tomato	2017+
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Consumers increasingly demand vegetables that are of better quality and available all year round. As a consequence, vegetables must be grown, shipped and sold in a variety of ways. Our Vegetables business is diverse and global, with key crops including melons, peppers, sweet corn and tomatoes.

Our strategy brings innovative solutions to growers worldwide to meet rising quality requirements. We use our strength across genetics, chemicals and biological controls to develop integrated crop management programs, which improve the sustainability and productivity of vegetable production.

Crop establishment is critical to raising yield potential. In addition to expanding the use of seed treatment, we are collaborating with leading young plant raisers to ensure access to new genetics and the on-time

delivery of healthy plants to growers. Growth in 2014, adjusted for the divestment of Dulcinea, was robust, with an upturn in demand in Europe, Africa and the Middle East. Asia Pacific saw strong growth, particularly in India, with increased market penetration for key crops such as tomatoes and peppers.

## Innovation in vegetable breeding

Projects to advance abiotic stress management through digitization, as well as breeding for tolerant traits in the high value pepper and tomato market, have differentiated our offer in both developed and developing markets.

New fruit sizes in melons and watermelons, tailored to the modern needs of families in North America and Europe, have contributed to growth in both regions. A keen understanding of the value chain and the advancement of new traits that improve the texture of fresh cut fruit and vegetables have expanded market access and delivered new benefits to consumers.

## Boosting smallholder productivity

Smallholder productivity, particularly in emerging Asia and Africa, has been hampered by relatively low utilization of technology. Our objective is to increase grower profitability, and our MAXVEG™ platform has consistently generated productivity improvements of more than



## Digital management increases pepper yield

Through the combination of a digital app and on-the-ground agronomic advice, pepper growers in Israel now get a more complete picture of their crop needs – and can optimize input and resources.

Capturing key data from the pepper plants and their growing environment, the app allows Syngenta to determine

the optimal nitrogen and water usage levels and to offer growers specific protocols suited to each pepper variety.

The result is a 25 percent increase in yield, and a 25 percent reduction in fertilizer and water inputs. As a next step, the expansion of digital management to other vegetable crops is planned.



20 percent in key vegetable markets in Indonesia, India and China.

Working with growers and channel partners, we focus on critical timings in the production cycle, integrating modern chemistry, agronomic advice and stewardship principles to maximize marketable yields through the safe and effective use of crop protection.

In 2014, we reached more than 200,000 growers on 100,000 hectares, delivering significant productivity gains.

## Lawn and Garden

Sales \$m

\$693 m



Crop Protection	466
Seeds	227

We are committed to enriching lives through the creation of healthy and inspiring living environments. With a focus on delighting our customers and channel partners, we are meeting current and future needs through the introduction of new solutions, business models and go-to-market strategies.

By maximizing the potential of our elite genetics and high-value chemistry, we have significantly increased business profitability and are on track to maintain our target of a 20 percent EBITDA margin in 2015.

## Revolutionizing the plant experience

In North America and Europe, our Flowers business successfully piloted a go-to-market strategy based on meeting the specific needs of customer segments within a retail environment. For example, our innovative consumer branded solutions appeal to consumers who have limited time to devote to their gardens. We are also aiming to provide an inspiring and exciting in-store experience for more engaged consumers. For the mass market, we consistently provide products that target grower efficiency through greenhouse management and protocols.

## Driving innovative, sustainable production

Sustainable production is top of mind throughout our flower production. In 2014, we introduced Global Good Agricultural Practice certification at our Kenyan flowers farms. This work will continue across our flowers sites during 2015. We also expanded our range of crop protection products by adding alternatives such as biologicals and insect-barrier methods within our flower farm operations.

## Creating and sustaining a modern green oasis

Our Turf and Landscape business is driven by the human need to connect with nature whether in an urban or rural environment.

We continue to promote biodiversity on the golf course. OPERATION POLLINATOR™ guidelines and advice have been developed specifically for golf courses, in partnership with specialist ecologists and agronomists from the UK-based Sports Turf Research Institute.

In Asia Pacific, we introduced airport mowing solutions, which include growth retardants to reduce the amount of personnel required to care for grass within secure areas.

## Life uninterrupted by pests

We strive to ensure that life is uninterrupted by pests and vector-borne disease for people across the world. Our customer-focused approach is about monitoring, diagnostics, risk assessment and judicious applications with appropriate follow-up. We are well placed to meet the needs of our customers through the integration of acquired technology, and with our own innovative products.

In July, we received US Environmental Protection Agency registration for ZYROX®, a cyantraniliprole-based fly bait, which is our first new product launch for the Farm Pest Control segment. The global launch began in the USA during the second half of 2014.

We also launched the new insecticide formulation, ACTELIC® 300 CS. This indoor residual spray is one of the most effective ways to prevent malaria. Its long-lasting efficacy eliminates the need for a second round of spraying even in areas where the transmission period lasts up to nine months.

# Delivering the strategy profitably – and sustainably

Our business strategy and The Good Growth Plan require us to be efficient, profitable and innovative – not just now but for the long term. We carefully consider the sustainability of our activities, our products and our relationships with all our stakeholders.

## Research and Development

Syngenta's business strategy and The Good Growth Plan are underpinned by our confidence that we can continue creating solutions that enable sustainable growth. Our Research and Development (R&D) strategy aims to meet growers' real needs, now and in the future, ahead of our competitors.

To do this, we are supplementing our strength in biotic stress management with increasing capability in abiotic stress control. We are also embracing selected new technologies, notably RNA interference and computational biology. In 2014, we invested \$1.43 billion in R&D.

### Investment in Research and Development \$bn

2014	1.43
2013	1.38
2012	1.26

## Organizing to work better

To deliver and accelerate our innovation strategy, we have simplified our operating model under new leadership appointed in 2014. We now have separate R&D functions, supported by common platforms in areas such as safety and regulatory, operations and trialing. We are also looking to extend our use of collaborations and outsourcing, which have proved their value in areas such as the hybridization of barley.

Productivity is not just an issue for growers or our manufacturing operations. In R&D, we are focusing on operational excellence to innovate better and faster by working smarter. In November 2014, we introduced lean and continuous improvement programs, drawing on the expertise and experience of our Production and Supply teams. Our overall aim is to be more agile and flexible – accelerating our programs through improved planning, more efficient ways of managing and working, focus on execution, the introduction of key performance indicators (KPIs) and a new platform enabling us to trial integrated solutions faster.

## Investing in resources for innovation

While maximizing our use of existing assets, we recognize the need to maintain investment in world-class facilities. In 2014, we invested in upgrades and expansion, primarily at Research Triangle Park in North Carolina, USA, and Stein in Switzerland.

Stein is building new glass-walled labs designed to foster interaction and knowledge-sharing – and an Advanced Crop Lab opens there in 2015, with growing areas able to simulate any climatic conditions.

## Investing in talent

Talent development is crucial to maintaining technology leadership. We are building an organization in which cross-disciplinary teams and thinking are the norm, particularly across crop protection and seed-related disciplines. Our Breeding Academy is a good example: over 180 people have now benefitted from its training, which helps chemists to better understand biology and crop breeding.

In 2014, we further improved our ranking in *Science* magazine's annual list of the world's top biotech employers. After five successive years in the top 20, we entered the top 10 in ninth place. Syngenta was particularly commended for treating employees with respect, being socially responsible and having values strongly aligned with employees' personal values.

External recognition for excellence in 2014 also included the Swiss Chemical Society's prestigious Sandmeyer Award for four Syngenta chemists. They were cited for innovation in discovering, developing and producing new broad-spectrum fungicides.

## Delivering innovation

We have a diverse and balanced portfolio of chemicals, genetics and integrated solutions for all our major crops. It is refreshed by constant innovation – to solve new problems and address old problems with new solutions that are more effective, safer or add more value.

## Innovation in Crop Protection

### Current portfolio highlights

ELATUS™ (SOLATENOL™): step change in control of soybean rust

FORTENZA® (cyantraniliprole): early season insect control

VIBRANCE® (sedaxane): SDHI seed treatment fungicide

CLARIVA™: biological soybean cyst nematode control

### Pipeline highlights

Year of launch

ACURON™ (bicyclopyrone): new mode of action for corn herbicides

2015

SOLATENOL™ on cereals, corn and specialty crops

2015–2016

New fungicides launches

2016–2018

Among new active ingredients in development, bicyclopyrone will be our first new corn herbicide in a decade when it is launched in the USA in 2015. Marketed as ACURON™, it controls a broad spectrum of weeds including large-seeded broad-leaved species.

After products are launched, our R&D teams continue to support them through our Product Life Cycle Management (PLCM) program – considering how best to maintain their long-term viability from both commercial and environmental perspectives. This work includes the registration of existing active ingredients in new markets and for new uses, improving formulations, developing new mixtures to manage resistance and pest shifts, and improving manufacturing processes – for example to reduce the generation of hazardous waste.

Our PLCM work in 2014 focused on our newest products: the roll-out of fungicide active ingredient SOLATENOL™ is progressing well, and second-generation formulations are in advanced development.

Our Seeds teams introduced new and improved disease-resistant traits to the market in brassicas, peppers, tomatoes, and lettuces. In the Latin American soybean market, we introduced a first-generation native trait to combat rust and INTACTA RR2 PRO®<sup>1</sup> plants genetically modified to resist worms. In rice, we launched a bacterial leaf blight-tolerant hybrid.

## Innovation in Seeds

### Current portfolio highlights

AGRISURE ARTESIAN®: native drought-tolerant trait

DURACADE™ trait: best-in-class corn rootworm control

HYVIDO®: hybrid barley seeds

Sugar cane nursery solutions: PLENE® EVOLVE™, PLENE® PB

### Pipeline highlights

Year of launch

Native traits for biotic and abiotic stress

2015+

New PLENE®

2017

Next generation soybean trait: multiple herbicide tolerance

2018

New hybrid technologies: rice 2-line, wheat

2018+

In corn, our drought-resistant native trait ARTESIAN™ sold out following its launch in Europe, and we continued to ramp-up sales in North America. We launched our corn rootworm trait DURACADE™ in a refuge-in-a-bag format with E-Z REFUGE®. And in East Africa, we launched a corn seed portfolio from our MRI Seed Zambia Ltd acquisition in 2013.

Our HYVIDO® hybrid barley was launched in Spain, and the first Syngenta-bred sugar cane clones advanced towards customer trials scheduled for 2015.

## Partnering to innovate

Complementing our internal resources through partnerships is a key element in our R&D strategy. In 2014, we strategically collaborated with universities, institutes and companies at the forefront of technology development to solve agricultural challenges, and we established some significant new partnerships.

In the USA, we began a new research collaboration with the Carnegie Institution of Washington. Dr Wolf B. Frommer, a world authority on transport biology, and his team are helping us to understand how advancing sugar transport in plants can improve crop yield.

In September 2014, PlantLab formally opened its state-of-the-art research facility in the Netherlands. One floor is devoted to the company's collaboration with Syngenta on projects to accelerate breeding in multiple crops and produce better quality plants.

<sup>1</sup> INTACTA RR2 PRO® is a trademark of Monsanto Technology LLC



## Operational performance



## Honoring a stroke of collective genius

Affecting crops across geographies, fungal diseases jeopardize harvests and livelihoods for growers worldwide. As existing crop protection solutions increasingly face resistance issues, bringing new chemistries to the market is paramount.

Syngenta scientists Hans Tobler, Denis V. Gribkov, Camilla Corsi and Harald Walter (from left to right) rose to this task, with the successful design,

discovery and development of three new succinate dehydrogenase inhibitor (SDHI) fungicides: isopyrazam, sedaxane and SOLATENOL™.

In 2014, the Swiss Chemical Society honored their efforts with the prestigious Sandmeyer Award. They accepted the award on behalf of their many colleagues from across the company, who collaborated to make this achievement possible.

During 2014, we strengthened our leading-edge cereals R&D by acquiring Italy's Società Produttori Sementi. Its unrivaled durum wheat breeding expertise and links to the food industry will help us accelerate innovation in quality durum wheat production, in turn helping more growers prosper in the competitive Italian market and supporting international expansion.

Our ongoing partnership with Rothamsted Research in the UK involves multiple projects designed to sustainably increase wheat productivity to yield 20 tonnes per hectare within 20 years. And our long-term partnership with the Shanghai Institute of Organic Chemistry gives us access to the most talented young scientists in China, providing continuous support to our R&D programs through world-class chemical innovation and productivity.

## People

The changing nature of our business and the markets in which we operate requires us to continue to attract, develop and retain great talent.

## Developing people and capabilities

We are committed to continuing to invest in our employees. In 2014, we invested \$29.8 million (+10 percent) in training programs to enable employees to achieve their full potential and to develop the right capabilities for our business. All employees participate in goal setting, review and development discussions with their line managers throughout the year. These discussions enable them to take accountability for developing both themselves and their careers. In addition, our employees have both local and global opportunities to develop their careers.

We continued to have a high employee retention rate in 2014 with the number of voluntary leavers – which excludes retirement and restructuring – remaining stable at 5.5 percent. There was a decrease in the total people turnover rate to 9.9 percent, from 14.1 percent in 2013.

In November, Syngenta announced important steps in the implementation of its Accelerating Operational Leverage program. This will result in job reductions and relocations totaling around 1,800 across the company, the majority of which will occur in 2015. We will carry out the planned job reductions and relocations in a socially responsible way.

## New diversity policy launched

As a leading company with operations in more than 90 countries, our business success reflects the quality and skill of our people. We recognize that human diversity is as important to our business as biodiversity. Embracing the unique perspectives and capabilities of our employees will help us continue to catalyze innovation, maximize performance and create business value.

To this end, our employees should reflect the diversity of our customers, the markets where we operate and the communities

which we serve. We see a diverse workforce and an inclusive workplace as enablers of our ambition to bring greater food security in an environmentally sustainable way to an increasingly populous world.

Our diversity policy and initiatives are based on: attracting, recruiting, retaining and engaging diverse talent; leveraging diversity and inclusion as a business driver; and being a leader in diversity and inclusion in business and the broader community.

## Engaging in The Good Growth Plan

Ensuring that our employees actively participate in delivering The Good Growth

Plan is paramount. Many employees around the world were engaged in business projects that specifically deliver on our commitments. Others participated in community engagement projects, which not only contribute to our commitments, but also help to open local discussions about the contribution Syngenta makes.

In October, we piloted a project in Bangladesh designed to give leaders in our business an opportunity to work with VSO International and local community leaders to understand more about the challenges that smallholders there are facing – from growing to marketing and selling their crops.

For 30 days, the Syngenta team lived and worked with smallholder farmers in Bangladesh, who grow potatoes and rice on less than a hectare of land each, to help them sustainably improve their food and economic security.

## Syngenta Awards

This year's Syngenta Awards received 783 entries from 50 countries, representing around 9,000 employees worldwide. These entries demonstrate the many projects underway across the company that are shaping our future, and which exemplify the outstanding achievements of teams and individuals.

Five outstanding teams from around the world were honored at the Syngenta Awards 2014 winners' ceremony. Categories include the overall Purpose Award, and four awards aligned with Syngenta's values: Innovation at scale, Health through action, Performance to win and Intensity with choice.

Read about the safety and security of our people on page 34.



## Supporting smallholders in Bangladesh

Turning our Good Growth Plan commitments into action, 15 Syngenta employees – with their skills ranging from agronomy and R&D to finance and business planning – traveled to Bangladesh in October 2014, for a month-long experiential learning program.

Together with representatives from our non-profit partner VSO, they resided with local families in villages in North West Bangladesh, and worked

directly with the communities to better understand the multifaceted challenges local rice and potato growers face on a daily basis.

Their work, which includes recommendations for new business models, community projects and improvements to the value chain, will be continued by a second group of employees in 2015.



See detailed "People" performance data on pages 54–55



Read more about "People" on [www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)

## Operational performance

Sustainable  
operations

Our Production and Supply strategy aims to support growth and enable us to deliver innovation to growers with scale and agility. In 2014, we have been accelerating its implementation to drive profitable growth.

As an integral part of this strategy, our Production and Supply team has intensified its focus on the sustainability of our operations. Just as The Good Growth Plan seeks to increase the sustainability of our offers in the field by 2020, this work aims to secure the long-term viability of our own activities. It is based on rigorous analysis over a period of some 18 months, considering our business sustainability in its broadest sense – economic and social as well as environmental.

In reporting our progress here, we review economic factors – the investment in new and upgraded capacity, and the effective management of input costs – that secure our ability to meet future market needs efficiently and profitably. We consider social factors: the way we protect and care for our own people, and the way we earn the support of our neighboring communities. And finally, we look at environmental factors: as our business evolves, we are refocusing our efforts to reduce our impact – applying deeper analysis and understanding of our emissions and use of resources.

Our suppliers are an essential, and growing, part of the way we create value. So we are involving them directly and explicitly in our sustainability efforts as part of our partnership with them.

Securing our ability  
to deliver profitably

We continue to invest in new capacity and capability at our active ingredient (AI) manufacturing sites. To meet growing demand in the Chinese market at a competitive cost, we have enlarged our Nantong site to undertake finished product processing, more than doubling its formulated product output. We have also commissioned the Shandong seeds processing project, where construction work began in early 2014.

In Brazil, expansion at the Formosa seed processing site will enable us to meet future corn seed demand, and we approved investment in the Paulinia plant to support our major new fungicide, ELATUS™. In the USA, we completed corn seed processing capacity expansion at the Phillips site.

All active ingredient site expansion projects were delivered safely, on time and budget, including key projects at Monthey and Kaisten in Switzerland and Huddersfield in the UK. Further expansion continues at Huddersfield, Monthey, and Nantong.

Several of our finished product processing sites have started 'lean' initiatives to enhance operational excellence. Continuing lean programs at all eight global AI sites helped maintain their ability to deliver at high capacity.

Our global sourcing team again achieved year-on-year savings, while continuing to develop long-term strategies and relationships with key suppliers. Its Supplier Relationship Management program is building effective partnerships that offer long-term value to both parties – delivering cost savings, supporting continuous improvement activities, and developing customer-of-choice status with key partners.

Our team supports suppliers, particularly those in China and India, in areas such as process development and improvement; design for new manufacturing plants; health, safety, and the environment. In return, we achieve competitive long-term pricing, including a constructive approach to risk sharing with some suppliers.

Working safely and securely  
in supportive communities

We aim to be an industry leader in health and safety standards and performance.

Our illness and injury rate remained low in 2014, at 0.37 recordable incidents per 200,000 hours (2013: 0.41) – resuming its downward trend after a slight increase in 2013. This was a good performance in a year of intensifying activity that included an increasing proportion of field work, where injury rates tend to be higher. For more detailed performance data see "People" on page 55.

Recordable illness and injury rate  
per 200,000 hours

2014	0.37
2013	0.41
2012	0.39

Sadly, we recorded two fatalities in 2014. One of our employees was traveling on business on Malaysia Airlines flight MH370, and a member of our technical support team in India was fatally injured in a motorcycle accident caused by a third party when leaving a customer site.

We have programs in place to continuously improve the safety of our sales force when driving. These focus on communication and awareness raising, driver training, improvement of vehicle fleet standards, and performance monitoring.



In June 2014, our largest AI plant, at Monthey, completed a million hours without a recordable incident following renewed focus on safety procedures. This reflects local leadership's dedication to building a safety culture based on our Goal Zero mission.

We take the security of our people, products, assets and information extremely seriously. As a global organization we are exposed to a significant and complex range of potential risks – from counterfeiting of our products to cybercrime. We aim to assess and address emerging security risks proactively, before they become live issues, and we train our local security staff in how to handle emergencies to safeguard our people and surrounding communities. In 2014, under our Security 360° program, our security professionals evaluated 105 sites to determine risk levels and help develop site-specific risk management plans.

Counterfeiting of our products can be hazardous to users and the public. We have increased our resources for combating it, and in 2014 played an active part in securing seizures of some 178 tons of counterfeit and illegally imported chemicals with an estimated retail value of \$17 million.

We constantly update the security that protects our IT systems and websites from hackers and cyber-attackers. In 2014, we successfully defended our main websites from three substantial attacks.



See detailed "Health, Safety, and Wellbeing" performance data on **page 55**



Read more about "Health, Safety, and Wellbeing" on **[www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)**

## Earning the support of our neighbors

Our operations are an integral part of local economies and communities, both urban and rural, in more than 90 countries worldwide. We aim to benefit them in a variety of ways.

We provide economic benefit by paying taxes, employing locally, and sourcing goods and services locally where appropriate. Each year, we report this social contribution as "economic value shared". In 2014, it totaled \$14,982 million (2013: \$14,864 million) – there is a detailed breakdown of this figure on page 58.

### Economic value shared

\$m

2014	14,982
2013	14,864
2012	13,866

But our economic contribution is only part of the picture. For many years, we have made it a business priority to partner directly with the local communities wherever we operate – contributing to their needs and responding to their interests and concerns. Good relationships are good for our business; we believe our business interests are best served when we listen to local communities, share knowledge, protect the environment, promote health, and improve the quality of life.

In 2014, we introduced a global Community Engagement Policy to formalize standards and expectations. This expands on the community commitments set out in our Code of Conduct and Health, Safety and Environment (HSE) Policy and Standards. It aims to guide a consistent approach to proactive involvement with all our local communities – to align interests, increase mutual understanding, build relationships, and take joint action for mutual benefit.

We rolled out the policy with a series of workshops bringing together some 300 people from 87 sites worldwide, representing around 20,000 employees and third-party workers. The aim was to share experiences across sites and geographies, as well as to enhance local capability to engage effectively.

We engage with communities in many different ways. Common themes include contributing to livelihoods through employment or vocational training and education, and working to improve the local environment through better waste management, access to safe and clean water, or improving habitats and land management.

Some activities are linked to our own operations. For example, our Huddersfield site won the UK Chemical Industry's 2014 Reputation Award for its open and imaginative two-way communication with local residents. This has included open site days and visits to farms to demonstrate the plant's contribution to agriculture.

## Operational performance

**Building trust with our neighbors**

While good neighborly relations are essential for the quality of life, building and maintaining them can be a challenge.

The team at our manufacturing site in Goa, India, started a dialogue with the local villages to understand their needs. Together with the community, they agreed an action plan that focuses on a range of priority areas including sanitation, education and employment.

In 2014, Syngenta supported more than 1,000 students with supplies and scholarships, and provided local smallholders with agronomic training. Overall, more than 4,000 families have already benefited from the program, and it has received the Corporate Social Responsibility Excellence Award from the Goa Chamber of Commerce and Industries.



Often our engagement is a response to local needs. For example, the team at our Goa site in India is actively engaging with neighbors and surrounding villages on issues such as sanitation practices, waste management, employment and income generation for youth, women's empowerment and eradication of malaria. The program has benefitted more than 4,000 local families, and Syngenta is now considered a true partner of the community. The program was recognized with the 2014 Syngenta Award for Health.



See detailed "Economic value shared" performance data on [page 58](#)



Read more about "Economic value shared" on [www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)

**Managing our environmental impact**

Our future viability depends on using resources efficiently and maintaining our license to operate by minimizing our external impacts. Deeper analysis of these impacts is driving a more focused approach to maximize the effectiveness of our environmental programs.

While we have over 250 sites, some 80 percent of all our environmental impact comes from our eight AI manufacturing plants. So a key element of our sustainable operations strategy is to concentrate effort on these sites, where continuous improvement can achieve reduced environmental impact.

As the company's business model has evolved over time – with greater emphasis on outsourcing many activities, for example – our focus needs to change accordingly. External suppliers now account for a very large part of our environmental footprint. So we are focusing more attention on the way we work together, to help them manage their environmental impacts to achieve acceptable operational standards.

Syngenta's environmental impacts are felt mostly in the areas of hazardous waste, wastewater, and energy and water consumption. We report our performance both in absolute and intensity-based terms, the latter expressed per dollar of sales. A review of each of these follows: for more detailed performance data see page 56.

## Waste and emissions

One of our major impacts is hazardous waste, generated mostly by our AI manufacturing sites. We aim to reduce the waste generated during product manufacturing, or enable it to be converted or reused. This requires constant attention to process optimization for both new and existing products. We are working to develop regeneration, recycling and waste minimization options.

Our overall hazardous waste intensity decreased by 3 percent compared to 2013. Although our Goa, India, site achieved a significant reduction of 31 percent in absolute terms, representing 16,677 tonnes, this was largely offset by increases at Grangemouth in the UK, where we switched from biological treatment to incineration, which in this case has a better overall environmental impact.

## Energy use and carbon footprint

We have undertaken energy reduction programs at all our major sites in recent years, and this remains a key focus area. In 2014, we were one of 187 companies selected from nearly 2,000 by the carbon disclosure organization CDP for demonstrating a superior approach to reducing carbon emissions and mitigating the business risks of climate change. Syngenta received a disclosure score of 97 and a performance rating of A.

New EU legislation requires all companies above a certain size to undertake energy audit programs or implement an energy management standard. We have extended our energy audit program to all our key sites worldwide. This will give us a more detailed picture of their performance to date and guide target setting and action plans from 2015.

In 2014, we recorded an overall 6 percent decrease in energy intensity compared to the previous year – primarily through significant decreases at our St Gabriel, USA, and Huddersfield, UK, sites. Energy-saving initiatives at our sites in Monthey, Switzerland, and Nantong, China, also achieved reductions. Despite a significant reduction in energy consumption by our own operations, the total CO<sub>2</sub>e emissions intensity decreased by only 2 percent – due mainly to a 6 percent increase in CO<sub>2</sub> emissions from distribution.

### CO<sub>2</sub>e emissions intensity

CO<sub>2</sub>e g/\$sales

2014	114
2013	116
2012	111

## Water consumption

Syngenta has been collecting detailed water usage data for the past five years. However, this has focused predominantly on extracted volumes from our manufacturing sites and has not considered consumption by our seed production, toll manufacturing and toll suppliers. In 2015, a comprehensive water footprint analysis will give us the data to develop a new baseline and detailed action plans. This analysis will be undertaken by a third party, to give us an independent view of our current impact.

In addition, we are currently running trials in Hungary and Brazil to assess efficient water use and the role of irrigation technology on our seed production farms. Together, these will help us to better understand ways of reducing water stress while increasing yield reliability and improving product quality. Though use of non-contact cooling water increased at Monthey, Switzerland, our water usage intensity remained stable at 2.5 liters/\$sales.

## Raising supply chain sustainability

Our supply chain has a significant impact on our operational sustainability, and has particular significance when we extend it into new markets that are less likely to share our sustainability standards.

We partner with our suppliers to enable them to meet our high production and quality standards, by identifying efficiencies and improving processes. An important part of our relationship with them is also to ensure they meet high standards on health, safety and labor conditions. Our substantial health, safety, environment and quality (HSEQ) audit program is an integral part of our supplier selection process.

In 2014, we carried out 72 assessments at chemical suppliers, 156 at warehouse and logistics service providers and 74 at formulation, fill, and packaging suppliers and seed tollers.

## Operational performance

In 2014, we brought the supplier audit program for our chemicals operations more closely in line with our internal audits. Where suppliers are required to make improvements, we now agree more detailed and prioritized action plans including follow-up to ensure that actions are progressed and completed.

Based on the approach we use to assess our chemical suppliers, we have enhanced our processes for assessing formulation, fill and packaging suppliers and seed toll manufacturing. We have developed a standardized approach that we will progressively introduce worldwide in 2015.

In Europe, we have developed a training program for employees who are working with our third-party chemical suppliers to educate them on identifying hazards at manufacturing plants and strengthen their role in conveying the importance of HSEQ to our suppliers. We will be expanding the program in other regions in 2015.

Recognizing our role in the development of standards across the chemical industry, we have partnered with an industry association in China to sponsor and contribute to health and safety workshops. We have also started a long-term initiative with key Chinese chemical suppliers to develop and implement best practice in process safety management. We continue to look at further opportunities to partner with industry.

For assurance of safe and fair labor conditions at our seed suppliers, we developed a Syngenta fair labor program; the number of suppliers worldwide covered by this program and within the audit scope of the Fair Labor Association (FLA) rose from 22,895 to 28,361 over the year. The India program is currently undergoing FLA accreditation to confirm that our methodology meets the FLA requirements in full. India represents about 40 percent of our total seed supplier base.

#### Seed supply farms included in Syngenta Fair Labor Program

2014	28,361
2013	22,895
2012	17,625

Our logistics operations provide the links between our factories, warehouses, and customers. Global logistics projects are currently underway to analyze and optimize these links, not only to reduce our carbon footprint, but also to ensure the traceability of our products. For example, in North America and Brazil, we aim to reduce our footprint by consolidating warehouses and optimizing transportation routes. We are also reviewing our use of rail transport.



See detailed "Sustainable operations" performance data on **pages 56–58**



Read more about "Sustainable operations" on **[www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)**

## Business integrity

We believe that building and maintaining a culture of doing the right thing is key to being a sustainably successful business. It is also the essential foundation on which The Good Growth Plan is built.

We comply with all local, national and international laws, codes and conventions, and uphold the principles set out in the Universal Declaration of Human Rights and the International Labor Organization's Core Conventions. Our Code of Conduct sets out clear ethical, environmental, and social responsibilities for all employees; we expect them to honor these and report any suspected breaches. We also monitor our suppliers' compliance with our standards and external regulations on issues such as health and safety, the environment, fair labor practices and animal welfare.

But we don't stop there. Business integrity goes beyond compliance and risk management – and no formal system of rules and regulations can cover all eventualities. So we are evolving from a rules-based approach to one that reaches deeper: a values-based culture of doing the right thing. And we are working to instill the same respect for these values in our partners and suppliers.

## Speaking up for what's right

Our Speak Up campaign aims to foster a more open culture in which people feel able to talk freely with colleagues and managers about any concerns they may have. As part of this, we relaunched our Compliance Helpline in 2014 to offer information and guidance on possible courses of action as well as a channel for raising concerns. We have also provided a comprehensive toolkit of materials on our intranet, to help employees learn more about compliance and enable leaders to build it into everyday working life.



## Compliance cases reported through the compliance helpline

2014	96
2013	110
2012	58

As a result, employees are now more comfortable about voicing a concern personally before it becomes an issue. While the number of reports of potential compliance incidents raised through the Compliance Helpline in 2014 reduced slightly to 96 (2013: 110), we have seen an increase in employees raising compliance questions with Group Compliance Officers or their local managers. Our more systematic approach has also given us a better picture of the issues our people are raising and how these are addressed.

## Sharing our values

We aim to train all our employees in our Code of Conduct and the values that underpin it. We are working to ensure that every new recruit receives a copy of the Code of Conduct and completes the Code of Conduct e-learning course.

## Managing compliance risk effectively

We have continued to strengthen and refine our governance framework. Compliance and Risk Management Committees in all territories mirror our global governance structure. They bring together leaders of the Commercial organization, Human Resources, Finance, Legal and Taxes, Syngenta Business Services, Production and Supply, and Health, Safety and Environment, so that we can take a holistic view of compliance and risk.

We have been enhancing our risk assessment processes to make them more forward-looking – proactively considering future risks, mitigation and response plans.

## Getting our suppliers on board

We want our suppliers and partners to join us in the evolution from rules-based to values-based compliance.

During 2014, suppliers to sites in Thailand and the Philippines joined local training and round-table discussions, ensuring that everyone received the same messages from Syngenta in an open and transparent way. This approach will be extended to sites in other countries in 2015.

Furthermore, we have developed a general guide for third parties that sets out our key positions and values, and what we expect from them beyond our contractual standards. After thorough testing, it will be available online from early 2015, helping us to engage our partners in deeper conversations about what we stand for and what we seek from them.



See detailed "Business integrity" performance data on [page 58](#)



Read more about "Business integrity" on [www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)

## Public debates

From time to time, events and issues arise that engage public interest and have a direct bearing on our business. They may involve risks to our reputation or our license to operate. And the interests of our various stakeholders may not be aligned; different groups may seek different, and often conflicting, outcomes.

In such cases, we strive to find ways of engaging with all the relevant interest groups to seek solutions through constructive discussion.

In 2014, three such issues stood out as particularly salient: bee health, asynchronous genetically modified (GM) seed approvals and resistance management.

## Bee health

The health of bees and other pollinators has declined significantly over the past 10–15 years across North America and Europe. Campaigners who attributed this to neonicotinoid pesticides, including our thiamethoxam, lobbied the EU for a two-year moratorium on these chemicals in specific applications from December 2013.

In 2014, a Task Force on Systemic Pesticides set up by the International Union for Conservation of Nature purported to show that regulatory agencies should consider applying the precautionary principle to further tighten regulations on neonicotinoids. In addition, Canadian beekeepers filed lawsuits seeking damages from Syngenta and another manufacturer.

## Operational performance

We are contesting these lawsuits and claims – and challenging the EU Commission's partial moratorium on thiamethoxam – because all our research, and many years of independent monitoring, have shown that neonicotinoids do not damage bee health when used properly. And farmers in the EU are increasingly concerned that the moratorium is reducing yields and forcing them to use older, less effective chemicals.

However, we share public concern about bee health. Bees are vital to farming; falling pollinator populations are detrimental to our business interests and those of our customers. The scientific consensus is that the health decline is due to a mix of many factors, and we are supporting further research.

As part of a comprehensive action plan with partners, we have implemented a Bee Demonstration Farm Network in the EU in oilseed rape. Together with machinery manufacturers, we are also evaluating prototype solutions to reduce dust emissions in the field. Our OPERATION POLLINATOR™ program provides flower seed mixes and agronomic advice to help farmers create pollinator friendly areas. Over the past decade, this has supported substantial bee population increases in 16 European countries, and we are currently extending it across North America and South Korea.



Read more on  
[www.plightofthebees.com](http://www.plightofthebees.com)  
and [www.operationpollinator.com](http://www.operationpollinator.com)

### Asynchronous approval of genetically modified seeds

Farmers cannot grow seeds with a new genetically modified trait until that trait has been approved by their national regulator. And traders cannot export grain containing a trait into another country until the trait has been approved by that country's regulator. Difficulties can arise when approval processes are not synchronized.

A recent example is our AGRISURE VIPTERA® corn trait. Since it was approved for US cultivation in 2010, it has been approved for cultivation in six more countries in North and South America – and for import into the EU and 12 other countries from Mexico to Japan. China had been accepting corn imports pending the approval we applied for in 2010; but in late 2013 it stopped accepting US shipments containing the AGRISURE VIPTERA® trait.

AGRISURE VIPTERA® was approved by China's regulatory authorities at the end of 2014. However, the case has highlighted the importance of aligning global regulatory processes. Prompt adoption of effective new technology is essential to farm productivity and world food security. So we are committed to all efforts aimed at aligning global regulatory processes. In the case of corn, we have joined with grower groups from North and South America in the MAIZALL initiative to align grain producing nations' use of technology with the regulatory processes of importers such as China.

Syngenta has at all times acted in compliance with US laws and regulations, and believes that pending lawsuits relating to the marketing of AGRISURE VIPTERA® are without merit.

We are also facilitating the adoption of beneficial new technology by working with partners. Our AGRISURE DURACADE® rootworm control technology is a valuable tool in areas experiencing heavy rootworm pressure. Growers using the trait can join our Right to Grow program under which Gaviion Grain, LLC guarantees to buy their grain at market prices.

### Resistance management

As fast as humans devise ways to combat threats to their crops, pests and weeds evolve new ways to fight back. Managing resistance is an essential part of sustainable intensive agriculture.

It's also an important discipline for our industry, because resistance can make good products prematurely obsolete. It's in our business interests to inform and educate farmers on how best to inhibit the emergence of new forms of resistance.

Diversity is the key. Resistance is closely linked to monoculture and single weed or insect management approaches. So we work with growers to develop solutions that combine multiple modes of action. These solutions integrate sustainable agronomic practices with new and established chemistries and, if appropriate, native or engineered seed traits and refuge-in-a-bag offers.

## The flipside of the precautionary principle

Triggered by a disputable publication on bee health, in 2013 the EU suspended the use of three neonicotinoid products, among them CRUISER® from Syngenta. When the suspension took effect, it hit oilseed rape farmers in the UK particularly hard: CRUISER® offers highly effective control of the flea beetle – a pest that literally grazes the crop.

Faced with a plague of flea beetles, UK growers had to resort to older chemistry to contain the damage. They sprayed pyrethroids, which not only require more applications, but also come with resistance issues and higher costs in labor and machinery. As a result of the EU intervention, both the sustainability and the economic contribution of farming have suffered.



This applies even with advanced products such as the DURACADE™ trait. Though DURACADE™ itself incorporates two distinct modes of action, we promote it as just one component in a corn rootworm control system, which combines sustainable practices such as crop rotation with protocols and protection products specified for local conditions. In the same way, to combat weed resistance – particularly glyphosate resistance – we rely on access to a choice of active ingredients, including paraquat. In Australia alone, paraquat prevents yield losses estimated at \$1.8 billion a year.

Sustainable pest control is underpinned by sound science. So we continue to support numerous collaborations with leading academic scientists in Australia, the USA, and many other countries to develop simulation models, evaluate scenarios and design effective resistance management practices.



## Performance data

## Regional performance

In 2014, we achieved our integrated sales target of 6 percent at constant exchange rates despite lower crop prices, unfavorable weather conditions in North America and a deliberate reduction in low margin sales of glyphosate. Emerging markets registered double digit growth for the fifth consecutive year despite the geopolitical uncertainty in the CIS.

Encouragingly, growth in Western Europe was also robust, with a particularly strong performance from our broadened fungicide portfolio. In Latin America, our new fungicide ELATUS™ achieved sales of more than \$300 million following its introduction in Brazil. This is the largest product launch in Syngenta's history, resulting in widespread grower recognition of the product's superlative performance against soybean rust.

Europe, Africa  
and the Middle EastSales<sup>1</sup> \$m

2014	4,547
2013	4,223
2012	3,974

A strong full year performance saw growth in all territories. The fourth quarter was driven by the rapid expansion of our HYVIDO® hybrid barley solution, the consolidation of seeds acquisitions and by strong early demand for crop protection. The CIS registered good volume growth in both Crop Protection and Seeds, with a rebound in the fourth quarter.

Significant price increases offset around half of the currency loss following the sharp depreciation of the Russian ruble and the Ukrainian hryvnia. New SDHI fungicides made a notable contribution to growth in the region, with SEGURIS® and VIBRANCE® both increasing sales by more than 75 percent.

## North America

Sales<sup>1</sup> \$m

2014	3,582
2013	3,848
2012	3,931

Sales were affected by prolonged cold temperatures in the first half of the year which delayed the start of the US season and reduced insect pressure. In Canada, cereals acreage was lower and demand was further affected by flooding. Non-selective herbicide sales in the region were down as a result of the deliberate reduction in glyphosate. In Seeds, soybean sales were up due to higher acreage and increased bulk shipments under an early order program. Corn sales were down in a context of reduced acres but demand for AGRISURE VIPTERA®, for which Chinese import approval was secured in December, was sustained.

## Latin America

Sales<sup>1</sup> \$m

2014	4,279
2013	3,991
2012	3,713

Although irregular rainfall caused some delays in planting and crop protection consumption, sales were up by 9 percent, or by 15 percent excluding glyphosate. In Crop Protection, our new fungicide ELATUS™ recorded sales of more than \$300 million following its launch in Brazil,

where there was also strong insecticide growth due to severe caterpillar pressure in soybean, corn and cotton. Crop protection for sugar cane was lower owing to drought during the summer and to lower ethanol prices affecting the profitability of sugar cane mills. Corn seed sales increased slightly despite lower acreage and soybean was up sharply.

## Asia Pacific

Sales<sup>1</sup> \$m

2014	2,033
2013	1,935
2012	1,827

Performance was robust in both emerging and developed markets, with particularly strong performances in South Asia, China and Australasia. Growth in fungicides reflected increased adoption of AMISTAR® technology in China and new launches in South Asia. Vegetables growth was driven by further adoption of MAXVEG™ protocols as well as sweetcorn seed growth in China and South Asia. Double digit sales growth in GRAMOXONE® reflected tight supply and higher prices, particularly in ASEAN; sales in China were sharply lower in the second half as government restrictions on liquid paraquat formulations took effect.

<sup>1</sup> Excluding Lawn and Garden

# Product line performance

## Crop Protection

### Selective herbicides

Sales<sup>1</sup> \$m

2014	3,083
2013	3,051
2012	2,939

Sales in Europe, Africa and the Middle East were strong, with the mild winter in the first half leading to increased weed pressure: sales of AXIAL® on cereals and BICEP™ II MAGNUM on corn were up strongly. In North America some pre-emergent sprays were missed in the first half due to the late season, but sales of DUAL MAGNUM® for corn were up strongly in the second half. FUSILADE®MAX and FLEX® on soybean performed well in the USA and in Argentina, where weed resistance is spreading.

### Non-selective herbicides

Sales<sup>1</sup> \$m

2014	1,445
2013	1,545
2012	1,246

Syngenta has decided to deliberately reduce low margin sales of TOUCHDOWN® (solo glyphosate) and to focus on mixtures including selective herbicides which can address the challenge of weed resistance. The impact on sales in 2014 was approximately \$150million. This was partly offset by good growth in GRAMOXONE® with strong demand and tight supply resulting in volume and price increases, primarily in ASEAN and Latin America.

### Fungicides

Sales<sup>1</sup> \$m

2014	3,518
2013	3,035
2012	3,044

The main contribution to growth came from our new product ELATUS™, based on the active ingredient SOLATENOL™, for which the ambitious first year sales target in Brazil was exceeded. SEGURIS®, our SDHI fungicide for cereals, performed well in Europe. AMISTAR® sales were lower in the Americas but grew strongly in Europe.

## Insecticides

Sales<sup>1</sup> \$m

2014	2,066
2013	1,912
2012	1,841

Insecticides showed good growth in all regions except North America, where sales were affected by the late season and low pest pressure. DURIVO® continued its rapid expansion with sales now exceeding the targeted \$400million. Strong pest pressure in soybean, corn and cotton, including the spread of the *Helicoverpa* caterpillar, drove sales in Brazil.

## Seedcare

Sales<sup>1</sup> \$m

2014	1,115
2013	1,228
2012	1,107

VIBRANCE®, based on our SDHI fungicide sedaxane, continued its rapid expansion with sales up by almost 50 percent. A reduction in sales of CRUISER® following the EU neonicotinoid suspension was partially offset by increased sales of CELEST®/MAXIM®, particularly in the CIS. Seedcare sales were also affected by lower sales to other seed companies in Latin America and the USA, where reduced corn acreage and plentiful seed supply affected demand.

## Seeds

### Corn and soybean

Sales \$m

2014	1,665
2013	1,654
2012	1,836

Sales in both North and Latin America reflected the shift from corn to soybean; in addition, soybean sales in Brazil benefitted from a new business partner strategy. Sales of our AGRISURE VIPTERA® corn trait were steady at around 30 percent of US corn seed sales. In Brazil, VIPTERA® accounts for around half the portfolio and has unrivaled success in addressing the pest spectrum there. Our new proprietary corn rootworm

trait DURACADE® was planted for the first time in the USA under the "Right to Grow" program. Corn seed sales in Europe showed strong growth driven by the CIS.

## Diverse field crops

Sales \$m

2014	827
2013	842
2012	719

Full year sales growth was helped by a strong fourth quarter including the consolidation of acquisitions in Europe. Sunflower sales were affected by reduced acreage in South East Europe but continued to expand in the CIS, where there was also a recovery in sugar beet. In Asia Pacific sales of rice increased reflecting sales from the Devgen acquisition as well as expansion in India.

## Vegetables

Sales \$m

2014	663
2013	708
2012	682

Excluding the divestment of Dulcinea Farms, sales were up 6 percent. Asia Pacific saw double digit growth driven by sweetcorn and peppers in China and South Asia. Rapid growth in the emerging markets of Africa Middle East continued with expanding melon and tomato penetration. In the CIS there was strong demand for peas and melon. Excluding Dulcinea, sales in North America were up 3 percent and the developed markets in Europe also returned to solid growth.

<sup>1</sup> Includes sales of Crop Protection products to Seeds and excludes non-product line sales

# Financial information

A summary of Syngenta's consolidated financial statements and other financial information is provided on pages 44 to 50. For full details and analysis of the Group's audited financial results, prepared in accordance with IFRS, please refer to our comprehensive Financial Report 2014, which is available on request or on our website [www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)

References to EBITDA in the following financial information excludes the impact of restructuring, impairment and discontinued operations.<sup>1</sup>

## Summarized financial information 2014 and 2013

Year ended December 31 (\$m, except per share amounts)	Excluding restructuring and impairment <sup>1</sup>		Restructuring and impairment		As reported under IFRS	
	2014	2013	2014	2013	2014	2013
<b>Sales</b>	<b>15,134</b>	14,688	–	–	<b>15,134</b>	14,688
<b>Gross profit</b>	<b>6,955</b>	6,702	<b>(13)</b>	–	<b>6,942</b>	6,702
Marketing and distribution	<b>(2,497)</b>	(2,394)	–	–	<b>(2,497)</b>	(2,394)
Research and development	<b>(1,430)</b>	(1,376)	–	–	<b>(1,430)</b>	(1,376)
General and administrative	<b>(717)</b>	(667)	<b>(193)</b>	(179)	<b>(910)</b>	(846)
<b>Operating income</b>	<b>2,311</b>	2,265	<b>(206)</b>	(179)	<b>2,105</b>	2,086
<b>Income before taxes</b>	<b>2,101</b>	2,113	<b>(206)</b>	(179)	<b>1,895</b>	1,934
Income tax expense	<b>(311)</b>	(323)	<b>38</b>	38	<b>(273)</b>	(285)
<b>Net income</b>	<b>1,790</b>	1,790	<b>(168)</b>	(141)	<b>1,622</b>	1,649
Attributable to non-controlling interests	<b>(3)</b>	(5)	–	–	<b>(3)</b>	(5)
<b>Attributable to Syngenta AG shareholders:</b>	<b>1,787</b>	1,785	<b>(168)</b>	(141)	<b>1,619</b>	1,644
<b>Earnings/(loss) per share (\$)<sup>2</sup></b>						
Basic	<b>19.49</b>	19.41	<b>(1.83)</b>	(1.53)	<b>17.66</b>	17.88
Diluted	<b>19.42</b>	19.30	<b>(1.82)</b>	(1.52)	<b>17.60</b>	17.78
	2014	2013	2014 CER <sup>3</sup>			
<b>Gross profit margin excluding restructuring and impairment</b>	<b>46.0%</b>	45.6%	<b>46.9%</b>			
<b>EBITDA<sup>4</sup></b>	<b>2,926</b>	2,895				
<b>EBITDA margin</b>	<b>19.3%</b>	19.7%				
<b>Tax rate on results excluding restructuring and impairment</b>	<b>15%</b>	15%				
<b>Free cash flow<sup>5</sup></b>	<b>1,083</b>	385				
<b>Trade working capital to sales<sup>6</sup></b>	<b>34%</b>	35%				
<b>Debt/Equity gearing<sup>7</sup></b>	<b>27%</b>	24%				
<b>Net debt<sup>7</sup></b>	<b>2,423</b>	2,265				
<b>Cash flow return on investment<sup>8</sup></b>	<b>11%</b>	13%				

<sup>1</sup> For further discussion of restructuring and impairment charges, see page 50. Net income and earnings per share excluding restructuring and impairment are provided as additional information and not as an alternative to net income and earnings per share determined in accordance with IFRS

<sup>2</sup> The weighted average number of ordinary shares in issue used to calculate the earnings per share were as follows: For 2014 basic EPS 91,674,127 and diluted 92,007,089; for 2013 basic EPS 91,952,222 and diluted 92,459,306

<sup>3</sup> For a description of CER, see page 50

<sup>4</sup> EBITDA is defined on page 50

<sup>5</sup> For a description of free cash flow, see page 50

<sup>6</sup> Period end trade working capital as a percentage of 12-month sales

<sup>7</sup> For a description of net debt and the calculation of debt/equity gearing, see page 50

<sup>8</sup> For a description of the cash flow return on investment calculation, see page 50

## Full year sales

Year ended December 31	2014 (\$m)	2013 (\$m)	Actual %	CER %
<b>Group sales</b>				
Europe, Africa and Middle East	4,547	4,223	+8	+11
North America	3,582	3,848	-7	-6
Latin America	4,279	3,991	+7	+9
Asia Pacific	2,033	1,935	+5	+10
<b>Total integrated sales</b>	<b>14,441</b>	<b>13,997</b>	<b>+3</b>	<b>+6</b>
<b>Lawn and Garden</b>	<b>693</b>	<b>691</b>	<b>-</b>	<b>+1</b>
<b>Group sales</b>	<b>15,134</b>	<b>14,688</b>	<b>+3</b>	<b>+5</b>

### Crop Protection by region

Europe, Africa and Middle East	3,312	3,033	+9	+11
North America	2,578	2,762	-7	-5
Latin America	3,769	3,499	+8	+10
Asia Pacific	1,722	1,629	+6	+10
<b>Total</b>	<b>11,381</b>	<b>10,923</b>	<b>+4</b>	<b>+6</b>

### Seeds by region

Europe, Africa and Middle East	1,274	1,232	+3	+9
North America	1,044	1,140	-8	-8
Latin America	522	521	-	+4
Asia Pacific	315	311	+1	+6
<b>Total</b>	<b>3,155</b>	<b>3,204</b>	<b>-2</b>	<b>+2</b>

### Sales by business

Crop Protection	11,381	10,923	+4	+6
Seeds	3,155	3,204	-2	+2
<i>Elimination of Crop Protection sales to Seeds</i>	<i>(95)</i>	<i>(130)</i>	<i>n/a</i>	<i>n/a</i>
<b>Total integrated sales</b>	<b>14,441</b>	<b>13,997</b>	<b>+3</b>	<b>+6</b>
<b>Lawn and Garden</b>	<b>693</b>	<b>691</b>	<b>-</b>	<b>+1</b>
<b>Group sales</b>	<b>15,134</b>	<b>14,688</b>	<b>+3</b>	<b>+5</b>

## Full year product line sales

Year ended December 31	2014 (\$m)	2013 (\$m)	Actual %	CER %
Selective herbicides	3,083	3,051	+1	+3
Non-selective herbicides	1,445	1,545	-6	-4
Fungicides	3,518	3,035	+16	+17
Insecticides	2,066	1,912	+8	+10
Seedcare	1,115	1,228	-9	-6
Other crop protection	154	152	+1	+4
<b>Total Crop Protection</b>	<b>11,381</b>	<b>10,923</b>	<b>+4</b>	<b>+6</b>
Corn and soybean	1,665	1,654	+1	+4
Diverse field crops	827	842	-2	+4
Vegetables	663	708	-6	-5
<b>Total Seeds</b>	<b>3,155</b>	<b>3,204</b>	<b>-2</b>	<b>+2</b>
<i>Elimination of Crop Protection sales to Seeds</i>	<i>(95)</i>	<i>(130)</i>	<i>n/a</i>	<i>n/a</i>
<b>Lawn and Garden</b>	<b>693</b>	<b>691</b>	<b>-</b>	<b>+1</b>
<b>Group sales</b>	<b>15,134</b>	<b>14,688</b>	<b>+3</b>	<b>+5</b>



## Performance data Financial information

## Condensed consolidated income statement

Year ended December 31 (\$m, except share and per share amounts)	2014	2013
<b>Sales</b>	<b>15,134</b>	14,688
Cost of goods sold	(8,192)	(7,986)
<b>Gross profit</b>	<b>6,942</b>	6,702
Marketing and distribution	(2,497)	(2,394)
Research and development	(1,430)	(1,376)
General and administrative:		
Restructuring	(193)	(179)
Other general and administrative	(717)	(667)
<b>Operating income</b>	<b>2,105</b>	2,086
Income from associates and joint ventures	7	48
Financial expense, net	(217)	(200)
<b>Income before taxes</b>	<b>1,895</b>	1,934
Income tax expense	(273)	(285)
<b>Net income</b>	<b>1,622</b>	1,649
Attributable to:		
Syngenta AG shareholders	1,619	1,644
Non-controlling interests	3	5
<b>Net income</b>	<b>1,622</b>	1,649
<b>Earnings per share (\$):</b>		
<b>Basic</b>	<b>17.66</b>	17.88
<b>Diluted</b>	<b>17.60</b>	17.78
<b>Weighted average number of shares:</b>		
Basic	91,674,127	91,952,222
Diluted	92,007,089	92,459,306

All activities were in respect of continuing operations.

## Restructuring and impairment before taxes

Year ended December 31 (\$m)	2014	2013
Accelerating operational leverage programs:		
Cash costs	49	–
Non-cash impairment costs	14	–
Integrated crop strategy programs:		
Cash costs	61	60
Operational efficiency programs:		
Cash costs	18	33
Non-cash impairment costs	–	6
Acquisition and related integration costs:		
Cash costs	27	30
Non-cash items		
Reversal of inventory step-ups	13	–
Reacquired rights	–	11
Divestment losses	–	4
Other non-cash restructuring and impairment:		
Non-current asset impairments	24	35
<b>Total restructuring and impairment before taxes<sup>1</sup></b>	<b>206</b>	179

<sup>1</sup> \$13 million (2013: \$nil) is included within Cost of goods sold

## Condensed consolidated balance sheet

At December 31 (\$m)	2014	2013
<b>Assets</b>		
<b>Current assets:</b>		
Cash and cash equivalents	1,638	902
Trade receivables	3,698	3,445
Other accounts receivable	747	979
Inventories	4,861	5,576
Derivative and other financial assets	377	195
Other current assets	244	249
<b>Total current assets</b>	<b>11,565</b>	<b>11,346</b>
<b>Non-current assets:</b>		
Property, plant and equipment	3,562	3,506
Intangible assets	3,186	3,381
Deferred tax assets	1,008	960
Financial and other non-current assets	420	819
Associates and joint ventures	188	204
<b>Total non-current assets</b>	<b>8,364</b>	<b>8,870</b>
<b>Total assets</b>	<b>19,929</b>	<b>20,216</b>
<b>Liabilities and equity</b>		
<b>Current liabilities:</b>		
Trade accounts payable	(3,472)	(3,817)
Current financial debt and other financial liabilities	(1,329)	(1,591)
Income taxes payable	(706)	(687)
Other current liabilities	(984)	(973)
Provisions	(216)	(288)
<b>Total current liabilities</b>	<b>(6,707)</b>	<b>(7,356)</b>
<b>Non-current liabilities:</b>		
Financial debt and other non-current liabilities	(2,976)	(1,796)
Deferred tax liabilities	(665)	(794)
Provisions	(676)	(766)
<b>Total non-current liabilities</b>	<b>(4,317)</b>	<b>(3,356)</b>
<b>Total liabilities</b>	<b>(11,024)</b>	<b>(10,712)</b>
<b>Equity:</b>		
Shareholders' equity	(8,889)	(9,491)
Non-controlling interests	(16)	(13)
<b>Total equity</b>	<b>(8,905)</b>	<b>(9,504)</b>
<b>Total liabilities and equity</b>	<b>(19,929)</b>	<b>(20,216)</b>

## Performance data Financial information

## Condensed consolidated cash flow statement

Year ended December 31 (\$m)	2014	2013
<b>Income before taxes</b>	<b>1,895</b>	<b>1,934</b>
Reversal of non-cash items	808	910
<b>Cash (paid)/received in respect of:</b>		
Interest and other financial receipts	277	216
Interest and other financial payments	(483)	(434)
Income taxes	(330)	(292)
Restructuring costs	(26)	(37)
Contributions to pension plans, excluding restructuring costs	(184)	(128)
Other provisions	(70)	(71)
<b>Cash flow before change in net working capital</b>	<b>1,887</b>	<b>2,098</b>
<b>Change in net working capital:</b>		
Change in inventories	326	(884)
Change in trade and other working capital assets	(332)	(365)
Change in trade and other working capital liabilities	50	365
<b>Cash flow from operating activities</b>	<b>1,931</b>	<b>1,214</b>
Additions to property, plant and equipment	(600)	(625)
Proceeds from disposals of property, plant and equipment	39	24
Purchases of intangible assets	(82)	(75)
Purchases of investments in associates and other financial assets	(38)	(27)
Proceeds from disposals of intangible and financial assets	39	21
Acquisitions and divestments, net	(87)	(90)
<b>Cash flow used for investing activities</b>	<b>(729)</b>	<b>(772)</b>
Increases in third party interest-bearing debt	2,272	714
Repayments of third party interest-bearing debt	(1,556)	(775)
(Purchases)/sales of treasury shares and options over own shares, net	(104)	(93)
Acquisition of non-controlling interests in subsidiaries	–	(39)
Distributions paid to shareholders	(1,032)	(921)
<b>Cash flow used for financing activities</b>	<b>(420)</b>	<b>(1,114)</b>
Net effect of currency translation on cash and cash equivalents	(46)	(25)
<b>Net change in cash and cash equivalents</b>	<b>736</b>	<b>(697)</b>
Cash and cash equivalents at the beginning of the year	902	1,599
<b>Cash and cash equivalents at the end of the year</b>	<b>1,638</b>	<b>902</b>

## Free cash flow

Year ended December 31 (\$m)	2014	2013
Cash flow from operating activities	1,931	1,214
Cash flow used for investing activities	(729)	(772)
Cash flow (from)/used for marketable securities	(1)	(7)
Cash flow used for acquisitions of non-controlling interests	–	(39)
Cash flow (from)/used for foreign exchange movements and settlement of hedges of inter-company loans	(118)	(11)
<b>Free cash flow</b>	<b>1,083</b>	<b>385</b>

## Full year segmental results excluding restructuring and impairment

2014 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Total Group
Sales	4,547	3,582	4,279	2,033	–	14,441	693	15,134
Cost of goods sold	(2,167)	(2,003)	(2,492)	(1,107)	(92)	(7,861)	(318)	(8,179)
<b>Gross profit</b>	<b>2,380</b>	<b>1,579</b>	<b>1,787</b>	<b>926</b>	<b>(92)</b>	<b>6,580</b>	<b>375</b>	<b>6,955</b>
Marketing and distribution	(720)	(564)	(615)	(314)	(110)	(2,323)	(174)	(2,497)
Research and development	–	–	–	–	(1,376)	(1,376)	(54)	(1,430)
General and administrative	(161)	(92)	(77)	(48)	(307)	(685)	(32)	(717)
<b>Operating income/(loss)</b>	<b>1,499</b>	<b>923</b>	<b>1,095</b>	<b>564</b>	<b>(1,885)</b>	<b>2,196</b>	<b>115</b>	<b>2,311</b>

2013 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Total Group
Sales	4,223	3,848	3,991	1,935	–	13,997	691	14,688
Cost of goods sold	(1,958)	(2,169)	(2,290)	(1,041)	(215)	(7,673)	(313)	(7,986)
<b>Gross profit</b>	<b>2,265</b>	<b>1,679</b>	<b>1,701</b>	<b>894</b>	<b>(215)</b>	<b>6,324</b>	<b>378</b>	<b>6,702</b>
Marketing and distribution	(676)	(544)	(594)	(300)	(104)	(2,218)	(176)	(2,394)
Research and development	–	–	–	–	(1,320)	(1,320)	(56)	(1,376)
General and administrative	(141)	(61)	(87)	(54)	(297)	(640)	(27)	(667)
<b>Operating income/(loss)</b>	<b>1,448</b>	<b>1,074</b>	<b>1,020</b>	<b>540</b>	<b>(1,936)</b>	<b>2,146</b>	<b>119</b>	<b>2,265</b>

## Segmental operating income reconciled to segmental results excluding restructuring and impairment

2014 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Total Group
<b>Operating income/(loss)</b>	<b>1,456</b>	<b>901</b>	<b>1,069</b>	<b>560</b>	<b>(1,981)</b>	<b>2,005</b>	<b>100</b>	<b>2,105</b>
Restructuring and impairment:								
Cost of goods sold <sup>1</sup>	13	–	–	–	–	13	–	13
Expenses	30	22	26	4	96	178	15	193
<b>Operating income excluding restructuring and impairment</b>	<b>1,499</b>	<b>923</b>	<b>1,095</b>	<b>564</b>	<b>(1,885)</b>	<b>2,196</b>	<b>115</b>	<b>2,311</b>
<b>Operating margin (%)</b>	<b>33.0</b>	<b>25.8</b>	<b>25.6</b>	<b>27.8</b>	<b>n/a</b>	<b>15.2</b>	<b>16.6</b>	<b>15.3</b>

2013 (\$m)	Europe, Africa, Middle East	North America	Latin America	Asia Pacific	Non- regional	Total integrated	Lawn and Garden	Total Group
<b>Operating income/(loss)</b>	<b>1,430</b>	<b>1,047</b>	<b>1,015</b>	<b>534</b>	<b>(2,037)</b>	<b>1,989</b>	<b>97</b>	<b>2,086</b>
Restructuring and impairment	18	27	5	6	101	157	22	179
<b>Operating income excluding restructuring and impairment</b>	<b>1,448</b>	<b>1,074</b>	<b>1,020</b>	<b>540</b>	<b>(1,936)</b>	<b>2,146</b>	<b>119</b>	<b>2,265</b>
<b>Operating margin (%)</b>	<b>34.3</b>	<b>27.9</b>	<b>25.6</b>	<b>27.9</b>	<b>n/a</b>	<b>15.3</b>	<b>17.2</b>	<b>15.4</b>

<sup>1</sup> Reversal of inventory step-up



## Performance data Financial information

**Constant exchange rates (CER)**

Results in this report from one period to another period are, where appropriate, compared using constant exchange rates (CER). To present that information, current period results for entities reporting in currencies other than US dollars are converted into US dollars at the prior period's exchange rates, rather than at the exchange rates for the current year. CER margin percentages for gross profit and EBITDA are calculated by the ratio of these measures to sales after restating the measures and sales at prior period exchange rates. The CER presentation indicates the underlying business performance before taking into account currency exchange fluctuations.

**EBITDA**

EBITDA is defined as earnings before interest, tax, non-controlling interests, depreciation, amortization, restructuring and impairment. Information concerning EBITDA has been included as it is used by management and by investors as a supplementary measure of operating performance. Management excludes restructuring from EBITDA in order to focus on results excluding items affecting comparability from one period to the next. EBITDA is not a measure of cash liquidity or financial performance under generally accepted accounting principles and the EBITDA measures used by Syngenta may not be comparable to other similarly titled measures of other companies. EBITDA should not be construed as an alternative to operating income or cash flow as determined in accordance with generally accepted accounting principles.

**Restructuring and impairment before taxes**

Restructuring represents the effect on reported performance of initiating and enabling business changes that are considered major and that, in the opinion of management, will have a material effect on the nature and focus of Syngenta's operations, and therefore require separate disclosure to provide a more thorough understanding of business performance. Restructuring includes the incremental costs of closing, restructuring or relocating existing operations, and gains or losses from related asset disposals. Restructuring also includes the effects of completing and integrating significant business

combinations and divestments, including related transaction costs, gains and losses. Recurring costs of normal business operations and routine asset disposal gains and losses are excluded.

Impairment includes impairment losses associated with major restructuring as well as impairment losses and reversals of impairment losses resulting from major changes in the markets in which a reported segment operates.

The incidence of these business changes may be periodic and the effect on reported performance of initiating them will vary from period to period. Because each such business change is different in nature and scope, there will be little continuity in the detailed composition and size of the reported amounts which affect performance in successive periods. Separate disclosure of these amounts facilitates the understanding of performance including and excluding items affecting comparability. Syngenta's definition of restructuring and impairment may not be comparable to similarly titled line items in financial statements of other companies.

**Free cash flow**

Free cash flow comprises cash flow from operating and investing activities; excluding investments in and proceeds from marketable securities, which are included in investing activities; excluding cash flows from and used for foreign exchange movements and settlement of related hedges on inter-company loans, which are included in operating activities; and including cash flows from acquisitions of non-controlling interests, which are included in financing activities.

Free cash flow is not a measure of financial performance under generally accepted accounting principles and the free cash flow measure used by Syngenta may not be identical to similarly titled measures of other companies. Free cash flow has been included as it is used by many investors as a useful supplementary measure of cash generation.

**Net debt reconciliation**

Net debt comprises total debt net of related hedging derivatives, cash and cash equivalents and marketable securities. Net debt is not a measure of financial position under generally accepted accounting principles and the net debt measure used by Syngenta may not be comparable to the similarly titled measure of other companies. Net debt has been included as it is used by many investors as a useful measure of financial position and risk. The following table presents the derivation of the debt/equity gearing ratio:

(\$m)	2014	2013
Net debt	<b>2,423</b>	2,265
Shareholders' equity	<b>8,889</b>	9,491
<b>Debt/Equity gearing ratio</b>	<b>27%</b>	24%

**Cash flow return on investment**

Cash flow return on investment is a measure used by Syngenta to compare cash returns to average invested capital. Gross cash flow used in the calculation comprises cash flow before change in net working capital, excluding interest and other financial receipts and payments. Invested capital comprises: total current assets, excluding cash and derivative and other financial assets; total non-current assets, excluding non-current derivative and other financial assets and defined benefit pension assets, and adjusted to reflect the gross book values of property, plant and equipment and intangible assets; total current liabilities, excluding current financial debt and other financial liabilities; and deferred tax liabilities.

# Non-financial information

At Syngenta, non-financial information refers to quantitative and qualitative information on strategies, policies or activities pursued towards our business, environmental and social goals.

Our non-financial performance is reported throughout this Annual Review, quantified in the non-financial performance summary on pages 53 to 58 and explained in further detail in the Online Annual Report.

## Corporate Responsibility

Corporate Responsibility (CR) is integral to our business. Our ambition is to bring greater food security to an increasingly populous world in an environmentally sustainable way by creating a worldwide step-change in farm productivity. In The Good Growth Plan, we have set specific, ambitious and measurable targets, which focus on boosting resource efficiency, rejuvenating ecosystems and strengthening rural communities. We are also committed to developing our people, reducing our environmental footprint, enhancing our social engagement, raising supply chain sustainability and doing business responsibly. Syngenta is guided by the conviction that short-, medium- and long-term value creation depends on the successful integration of business, social and environmental performance.

## Corporate Responsibility governance

Our Board-level Corporate Responsibility Committee, chaired by the Syngenta Chairman, acts as the custodian on all CR matters for Syngenta. At senior executive level, the Corporate Responsibility Panel directs CR-related standards, strategy, objectives and partnerships, and the Compliance and Risk Management Committee reviews and advises on non-financial reporting and the effectiveness of implementation of internal policies.

## Materiality and stakeholder engagement

We regularly assess stakeholder concerns and expectations, as well as the issues that we believe present the greatest risks and opportunities for our business. We use the results to drive our strategy, determine allocation of resources and guide our communication.

We engage with and collect feedback from stakeholders in a variety of ways. We listen to the grower community through satisfaction surveys and farmers' direct contact with our sales teams on the ground. We also engage directly with our employees and locally with the communities close to our operations. Our interaction with industry associations, non-governmental organizations, governments and the investor community enables us to gather feedback on our activities and monitor issues important to stakeholders. We also conduct research to better understand consumers' perception of topics associated with agriculture and our industry.

In particular, our stakeholders want to know how our technologies and products will enable growers to deliver sustainably the quality and quantity of food needed by a growing population. Maintaining soil fertility, using water efficiently and conserving biodiversity while helping people in rural communities live better lives are priorities. Other important issues for us and our stakeholders are business integrity, labor rights, supply chain sustainability, environmental efficiency, health and safety, talent attraction and retention, and community engagement.

## Approach to non-financial reporting

Non-financial performance data are presented in four sections in the following pages, which align with the structure of this report: The Good Growth Plan, people, sustainable operations and business integrity. The structure has been modified compared to previous reports to better represent our CR activities and, in particular, those of The Good Growth Plan.



## Performance data Non-financial information

Our non-financial reporting is for the operations of Syngenta Group, including material interactions with selected third parties as reported in the non-financial performance summary. Our non-financial reporting is guided by the Global Reporting Initiative principles and externally assured by PwC. The non-financial reporting period is October 1 to September 30, with the exceptions noted.

### The Good Growth Plan reporting

In the first year of The Good Growth Plan reporting, our focus has been on laying the foundation for a rigorous process. We have identified performance indicators, designed reporting processes and gathered data for each commitment. We anticipate publishing additional indicators in the years ahead. We report progress in our Annual Report and on The Good Growth Plan website.

To measure progress in each of The Good Growth Plan commitments in 2014, we have carried out and report on the following:

- **Make crops more efficient:** We have established a network of reference and benchmark farms, grouped in clusters of homogeneous agro-climatic conditions and grower characteristics. Reference farms use one or more Syngenta product(s) or recommended protocols and have a direct link to Syngenta. Benchmark farms are randomly selected by an independent company and represent conventional grower practice for each cluster. As the baseline year is 2014, all clusters are reported as “≤0%” in land productivity, nutrient efficiency and pesticide efficiency. Moving forward, we will report the percentage increase achieved in reference and benchmark farms on a cluster basis compared to the baseline year. Further details are published online.

- **Rescue more farmland:** We report on the number of hectares of ‘impacted farmland’ – land benefiting from sustainable soil management and use practices such as conservation tillage, crop rotation and permanent ground cover. These practices improve soil fertility, drawing on state-of-the-art scientific knowledge and assessments developed jointly with third parties.
- **Help biodiversity flourish:** Through this commitment, we aim to promote healthy, functional and resilient ecosystems. We therefore report on the number of hectares of ‘impacted farmland’ – land benefiting from biodiversity enhancement practices. Examples of such practices include multifunctional field margins, restoration and maintenance of managed forests, and agro-forestry.
- **Empower smallholders:** We report on the number of smallholder farmers reached indirectly through sales and directly through our field-force activities.
- **Help people stay safe:** We report on the number of people who attended safe use training activities on the responsible handling and use of crop protection products; these include farm workers, farm owners, product distributors, employees, and others who may have contact with crop protection products. We also provide information on the percentage of smallholders trained. This year, in line with past practice, we also report on the number of countries with established toxicovigilance programs through which attending physicians can receive medical advice on treatment for health effects following misuse of pesticides, whether accidental or intentional.

- **Look after every worker:** We report on the number of seed supply farms included in the Syngenta Fair Labor Program. Specifically, we report on the number of farms included in the audit scope of the Fair Labor Association (FLA). The program assesses labor practices at the farms, including health and safety, child labor, awareness of workers’ rights, wages and benefits, working hours, harassment and abuse, and discrimination. This year, in line with past practice, we also report on the number of health, safety, environment and quality (HSEQ) assessments conducted at suppliers.

### Intensity figures

We report on our environmental performance in absolute and intensity-based terms. In the past, intensity figures were normalized using \$EBIT excluding restructuring and impairment. In response to stakeholder feedback, we use sales figures (\$sales) as the normalization factor from this year on.



More online:  
[www.syngenta.com/ar2014](http://www.syngenta.com/ar2014)  
[www.cr.syngenta.com](http://www.cr.syngenta.com)  
[www.goodgrowthplan.com](http://www.goodgrowthplan.com)  
[www.questions.syngenta.com](http://www.questions.syngenta.com)  
[www.gri.syngenta.com](http://www.gri.syngenta.com)

## The Good Growth Plan

Reference farm and benchmark farm performance compared to baseline 2014 represents the distribution of percentage increases achieved in reference and benchmark farms compared to the baseline year on a cluster basis. The table is set up to show trends over time on reference and benchmark farms. As the baseline year is 2014, all clusters are reported as “≤0%” this year.



## Performance data Non-financial performance summary

## The Good Growth Plan continued

Cumulative since  
baseline 2014

	2014	2013	2012
<b>Rescue more farmland<sup>1</sup></b>			
Hectares of impacted farmland (m)	0.8	0.8	–
<b>Help biodiversity flourish<sup>1</sup></b>			
Hectares of impacted farmland (m)	0.7	0.7	–
<b>Empower smallholders<sup>1</sup></b>			
Smallholders reached indirectly through sales (m)	15.3	–	–
Smallholders reached directly through field force activities (m)	3.3	–	–
<b>Help people stay safe</b>			
People trained on safe use (m)	4.7	4.7	2.8
Of which: smallholders <sup>1</sup>	74%	–	–
Countries with established Syngenta product toxicovigilance programs	100	100	85
Crop Protection sales represented	93%	93%	92%
<b>Look after every worker</b>			
Seed supply farms included in Syngenta Fair Labor Program <sup>2</sup>	28,361	22,895	17,625
HSEQ assessments at chemical suppliers	72	86	74
HSEQ assessments at formulation, fill and packaging suppliers and seed toll manufacturing <sup>3</sup>	74	38	35
HSEQ assessments at warehouse/logistics service providers	156	157	115

<sup>1</sup> 2014 first year of reporting<sup>2</sup> Number of farms in Fair Labor Association (FLA)'s audit scope<sup>3</sup> Seed toll manufacturing has been included since 2014

## People

	2014	2013	2012
<b>Employment</b>			
Employees <sup>1</sup>	29,340	28,149	27,262
Europe, Africa and Middle East <sup>2</sup>	13,300	12,763	12,417
North America	4,636	4,654	4,598
Latin America	4,945	5,221	5,095
Asia Pacific	6,459	5,511	5,152
Part-time employees	948	976	975
Turnover rate <sup>3</sup>	9.9%	14.1%	12.4%
of which: <35 years	43%	43%	44%
35-50 years	41%	35%	35%
>50 years	16%	22%	21%
Attrition rate <sup>4</sup>	5.5%	5.5%	6.0%
Senior managers	359	366	334
Headquarters	42%	47%	50%
Europe, Africa and Middle East	18%	13%	13%
North America	18%	18%	19%
Latin America	12%	12%	10%
Asia Pacific	10%	10%	8%
<b>Diversity</b>			
Nationalities in senior management	40	41	38
Female employees	29%	30%	31%
Female employees in management roles	21%	20%	20%
Female employees in senior management	13%	13%	13%

<sup>1</sup> Permanent full-time equivalent (FTE)<sup>2</sup> Including headquarters (Switzerland)<sup>3</sup> Including voluntary leavers, retirees and restructuring<sup>4</sup> Includes only voluntary leavers

## People continued

	2014	2013	2012
<b>Employee development <sup>1</sup></b>			
Training investment (\$m)	29.8	27.1	24.6
Average training investment per employee (\$) <sup>2</sup>	1,015	964	901
<b>Reward and recognition</b>			
Employees eligible to participate in Employee Share Purchase Plan (ESPP)	18,779	18,790	16,561
of which: employees participating	43%	47%	46%
Employees participating in long-term equity incentive plans	1,304	1,226	1,098
<b>Health, safety and wellbeing</b>			
Recordable injury and illness rate (IIR) per 200,000 hours <sup>3</sup>	0.37	0.41	0.39
Recordable injury rate per 200,000 hours <sup>3</sup>	0.33	0.35	0.35
Europe, Africa and Middle East <sup>4</sup>	0.41	0.38	0.39
North America	0.54	0.64	0.87
Latin America	0.41	0.38	0.17
Asia Pacific	0.10	0.15	0.16
Recordable occupational illness rate per 200,000 hours <sup>3</sup>	0.04	0.07	0.03
Europe, Africa and Middle East <sup>4</sup>	0.03	0.07	0.07
North America	0.02	0.14	0.00
Latin America	0.12	0.08	0.00
Asia Pacific	0.01	0.02	0.03
First aid cases	420	623	693
Recordable injuries <sup>5</sup>	145	148	144
Bruise, strain, sprain and dislocation	52%	44%	31%
Cut and abrasion	19%	22%	30%
Bone fracture	11%	15%	17%
Concussion and internal injury	4%	1%	3%
Multiple injuries	3%	–	–
Other	11%	18%	19%
Cases of recordable occupational illness	17	28	14
Cases of work-related stress <sup>6</sup>	35	36	127

<sup>1</sup> Includes only training delivered by external providers

<sup>2</sup> Permanent full-time equivalent (FTE)

<sup>3</sup> According to US OSHA definition for injuries and illness

<sup>4</sup> Including headquarters (Switzerland)

<sup>5</sup> New reporting system and injury categories introduced in 2014. 2013 and 2012 percentages were restated to align to new breakdown

<sup>6</sup> The high value in 2012 is due in most cases to a change in shift pattern at our Monthey site in Switzerland. Following extensive consultation, a new shift pattern was implemented early in 2013

## Performance data Non-financial performance summary

## Sustainable operations

	2014	2013	2012
<b>Energy</b>			
<b>Energy intensity (MJ/\$sales)</b>	<b>0.66</b>	0.69	0.66
Energy (TJ)	9,930	10,202	9,336
Gas (TJ)	3,946	4,050	3,936
Electricity (TJ)	2,460	2,459	2,347
Steam (TJ)	1,633	1,578	1,419
Oil (TJ)	854	975	703
Other (TJ)	1,037	1,140	931
<b>Greenhouse gases</b>			
<b>Total CO<sub>2</sub>e emissions intensity (g/\$sales)</b>	<b>114</b>	116	111
Total CO <sub>2</sub> e emissions (000s tonnes)	1,730	1,710	1,574
Within direct control:			
CO <sub>2</sub> e emissions from own operations (000s tonnes)	620	634	665
CO <sub>2</sub> emissions from company vehicles (000s tonnes)	75	76	68
Within indirect control:			
CO <sub>2</sub> e emissions from purchased energy (000s tonnes)	419	417	391
CO <sub>2</sub> emissions from business trips (000s tonnes)	43	40	45
CO <sub>2</sub> emissions from distribution (000s tonnes)	573	543	405
<b>Other air emissions</b>			
<b>Other air emissions intensity (g/\$sales)</b>	<b>0.099</b>	0.103	0.100
Other air emissions (tonnes)	1,500	1,514	1,421
NO <sub>x</sub> (tonnes)	523	440	476
Non-halogenated VOCs (tonnes)	435	427	505
Halogenated VOCs (tonnes)	32	21	13
Particulates (tonnes)	101	105	108
SO <sub>2</sub> (tonnes)	386	494	295
NH <sub>3</sub> (tonnes)	6	8	8
HCl (tonnes)	17	19	16
<b>Water</b>			
<b>Water usage intensity (liters/\$sales)</b>	<b>2.5</b>	2.5	2.4
Water usage (million cubic meters)	37.8	36.8	33.8
Cooling (million cubic meters) <sup>1</sup>	21.2	19.4	18.0
Irrigation (million cubic meters)	7.0	7.6	6.5
Processing and washing (million cubic meters)	7.3	7.4	7.0
Product ingredient (million cubic meters)	0.3	0.3	0.2
Sewage and sanitary (million cubic meters)	1.0	1.1	1.0
Other (million cubic meters)	1.0	1.0	1.1
Origin of water:			
Surface fresh water (million cubic meters)	26.7	25.6	23.9
Underground water (million cubic meters)	7.7	7.8	7.1
Drinking water from municipal network (million cubic meters)	2.9	3.0	2.7
Recovered rain water (million cubic meters)	0.1	0.1	0.1
Saline water (million cubic meters)	0.4	0.3	0.0

<sup>1</sup> Increase in 2014 value due to 9 percent increase in non-contact cooling water use in our Monthey production site because of increased production

## Sustainable operations continued

	2014	2013	2012
<b>Wastewater effluents</b>			
<b>Industrial wastewater discharge intensity (liters/\$sales)</b>	<b>0.66</b>	0.74	0.71
Industrial wastewater discharge (million cubic meters)	10.0	10.8	10.1
Total organic carbon (TOC) (tonnes)	687	879	771
Chemical oxygen demand (COD) (tonnes)	2,059	2,679	2,337
Biological oxygen demand (BOD) (tonnes)	197	225	239
Total suspended solids (tonnes)	370	345	363
Soluble salts discharged (000s tonnes)	137	143	133
Direct discharge of uncontaminated cooling water (million cubic meters) <sup>1</sup>	21.0	19.1	17.8
<b>Waste</b>			
<b>Hazardous waste intensity (g/\$sales)</b>	<b>15.6</b>	16.0	13.4
Hazardous waste (000s tonnes)	236	235	190
Recycled and re-used (000s tonnes)	114	72	60
Incinerated (000s tonnes)	106	148	118
Landfill (000s tonnes)	1	3	1
Other (000s tonnes)	15	12	11
Hazardous waste by type:			
Chemical	59%	66%	65%
Solvents	33%	27%	26%
Other	8%	7%	9%
<b>Non-hazardous waste intensity (g/\$sales)</b>	<b>9.4</b>	9.0	7.7
Non-hazardous waste (000s tonnes) <sup>2</sup>	143	132	110
Recycled and re-used (000s tonnes)	106	101	80
Incinerated (000s tonnes)	9	8	4
Landfill (000s tonnes)	20	17	19
Other (000s tonnes)	8	6	7
Non-hazardous waste by type:			
Plant and seed waste from seed sites	65%	66%	60%
Inerts	4%	3%	5%
Packaging materials	6%	7%	7%
Household	5%	5%	5%
Other	20%	19%	23%
<b>Environmental compliance</b>			
Significant unplanned releases <sup>3</sup>	0	1	0
<b>Security management</b>			
Evaluated sites <sup>4</sup>	105	70	72
Of which: production sites	41%	44%	39%

<sup>1</sup> Increase in 2014 value due to 9 percent increase in non-contact cooling water use in our Monthey production site because of increased production

<sup>2</sup> Increase in 2014 value due mainly to increased disposal of seeds

<sup>3</sup> Releases that escape beyond the site boundary and cause either environmental impact and/or concern from neighbors, regulators, etc

<sup>4</sup> Policy on security management reporting was revised: 2014 includes all evaluated sites. 2013 and 2012 include only sites in medium and high-risk countries



## Performance data Non-financial performance summary

## Sustainable operations continued

	2014	2013	2012
<b>Economic value shared</b>			
Economic value shared (\$m)	14,982	14,864	13,866
Payments to suppliers	9,613	9,792	8,550
Employee wages and benefits	2,888	2,828	2,710
Payments to governments (taxes) <sup>1</sup>	366	405	345
Payments to providers of capital <sup>2,3</sup>	1,285	1,139	971
Capital expenditure <sup>4</sup>	805	679	662
Corporate community investment <sup>5</sup>	25	21	19

1 Consists of income and other taxes paid, excluding VAT (included in Payments to suppliers) and employment-related taxes (included in Employee wages and benefits)

2 Consists of expenditures for dividends, share repurchases (excluding those for employee share plans) and interest on debt

3 Increase in Payments to providers of capital reflects an increased dividend payment in 2014

4 Increase in Capital expenditure reflects investment in production capacity and research and development facilities to support long-term growth objectives

5 The PwC Independent Assurance Report includes in its scope only the Corporate community investment figure used in the calculation of Economic value shared

## Business integrity

	2014	2013	2012
<b>Corporate conduct</b>			
Compliance cases reported through the compliance helpline <sup>1</sup>	96	110	58
<b>Animal testing compliance</b>			
Management system audits performed in contract laboratories	17	13	15
Management system non-compliances found	0	0	1
<b>Biotechnology and regulatory compliance</b>			
Employees completing trial regulatory compliance training	1,711	1,228	1,559
Trial locations requiring a permit	411	420	400
Trial inspections performed by Syngenta	203	272	278
<b>Quality management<sup>2,3</sup></b>			
Quality audits performed on own sites	97	83	91
Quality audits performed on third parties <sup>4</sup>	83	496	89

1 This does not include cases reported through line management, HR or legal processes. 2013 increase reflects improved communication

2 In 2014 and 2013, reporting year ended September 30. In 2012, reporting year ended December 31

3 Further refinement of the "quality audit" definition has resulted in a significant decline in the number of audits performed. Starting 2014, "assessments" are no longer included in the reported value

4 The high value in 2013 is due to 411 audits in North America due to the wider introduction of a trait technology

# Independent Assurance Report on the Syngenta Non-financial Reporting

To the Head of Legal and Taxes, Syngenta AG, Basel ("Syngenta")

We have been engaged to perform assurance procedures to provide assurance on the aspects of the non-financial reporting 2014 of Syngenta included in the Annual Review 2014 ("Report").

## Scope and Subject matter

Our limited assurance engagement focused on the following data and information disclosed in the non-financial reporting of Syngenta and its consolidated subsidiaries, for the financial year ended December 31, 2014:

- The application of the Syngenta internal Health, Safety and Environment (HSE), Corporate Community Investment (CCI) and The Good Growth Plan reporting guidelines in the non-financial reporting, in all material aspects;
- the internal reporting system and procedures, including the control environment, to collect and aggregate non-financial data;
- the Non-financial Performance Summary disclosed on pages 53 to 58 of the Report.

Our assurance procedures do not cover the indicators on payments to suppliers, employee wages and benefits, payments to governments and providers of capital, and capital expenditure presented in the Non-financial Performance Summary on page 58 of the Report.

## Criteria

The reporting criteria used by Syngenta are described in the internal non-financial reporting guidelines and define those procedures, by which the non-financial performance data are internally gathered, collated and aggregated.

The accuracy and completeness of non-financial performance indicators are subject to inherent limitations given their nature and methods for determining, calculating and estimating such data. Our assurance report should therefore be read in connection with Syngenta's internal guidelines, definitions and procedures on the reporting of its non-financial performance.

## Responsibilities and Methodology

The Board of Directors of Syngenta AG is responsible for both the subject matter and the criteria as well as for the selection, preparation and presentation of the selected information in accordance with the criteria. Our responsibility is to form an independent opinion, based on our limited assurance procedures, on whether anything has come to our attention to indicate that the identified

non-financial information selected contained in the Report 2014 is not stated, in all material respects, in accordance with the reporting criteria.

We planned and performed our procedures in accordance with the International Standard on Assurance Engagements (ISAE 3000) "Assurance engagements other than audits or reviews of historical financial information". This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance on the identified information.

For the subject matter for which we provide limited assurance, the nature, timing and extent of procedures for gathering sufficient appropriate evidence are deliberately limited relative to a reasonable assurance engagement.

We have complied with the independence and other ethical requirements of the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

During 2014 we have not performed any tasks or services for Syngenta that would conflict with our independence, nor have we been responsible for the preparation of any part of the report; and therefore qualify as independent as defined by Code of Ethics and applicable legal and regulatory requirements.

## Summary of work performed

Our assurance procedures included, amongst others, the following work:

### Evaluation of the application of Group guidelines

Reviewing the application of the Syngenta internal non-financial reporting guidelines;

### Site visits

Visiting seven different sites in China, France, Hungary and Switzerland (Regional Offices, Research and Development, Seeds, Active Ingredients and Crop Protection). The selection was based on quantitative and qualitative criteria;

Interviewing personnel responsible for internal reporting and data collection at the sites we visited and at the Group level;

### Assessment of the performance indicators

Performing tests on a sample basis of evidence supporting the Non-financial Performance Summary relative to completeness, accuracy, adequacy and consistency;

## Review of the documentation

Reviewing the relevant documentation on a sample basis, including management and reporting structures and documentation;

## Assessment of the processes and data consolidation

Reviewing the appropriateness of the management and reporting processes for non-financial reporting. Assessing the consolidation process of data at the Group level.

We have neither carried out any work in respect of projections and targets nor such outside of the agreed scope and therefore restrict our conclusion to the non-financial reporting 2014 of Syngenta.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our assurance conclusions.

## Conclusion

Based on our work performed and described in this report on the identified non-financial reporting 2014 nothing has come to our attention causing us to believe that

- Syngenta's internal non-financial reporting guidelines are not being applied in all material aspects;
- Syngenta's internal reporting systems to collect and aggregate non-financial data are not functioning as designed and provide an appropriate basis for its disclosure in all material aspects; and
- data and information mentioned in the subject matter and disclosed with the non-financial reporting in the Syngenta Annual Review 2014 on pages 53 to 58 does not give a fair picture of Syngenta's non-financial performance.



PricewaterhouseCoopers AG  
Zurich, February 16, 2015  
Gerd Tritschler  
Jonas Buol

## Board of Directors

at December 31, 2014

Syngenta is led by a strong and experienced Board of Directors. The Board includes representatives with eight nationalities, drawn from broad international business and scientific backgrounds. Its members bring diversity in expertise and perspective to the leadership of a complex, highly-regulated, global business.



### Jürg Witmer

Vice Chairman, non-executive Director. Chairman of the Compensation Committee, member of the Chairman's & Governance Committee and the Nomination Committee

Born: 1948. Nationality: Swiss.  
Initial appointment: 2006.



### Gunnar Brock

Non-executive Director. Chairman of the Audit Committee and member of the Nomination Committee

Born: 1950. Nationality: Swedish.  
Initial appointment: 2012.



### Eveline Saupper

Non-executive Director. Member of the Compensation Committee

Born: 1958. Nationality: Swiss.  
Initial appointment: 2013.



### Michel Demaré

Chairman of the Board, non-executive Director. Chairman of the Chairman's & Governance Committee, the Corporate Responsibility Committee and the Nomination Committee. He is also Chairman of the Syngenta Foundation for Sustainable Agriculture

Born: 1956. Nationality: Belgian.  
Initial appointment: 2012.



### Vinita Bali

Non-executive Director. Member of the Corporate Responsibility Committee

Born: 1955. Nationality: Indian.  
Initial appointment: 2012.



### Eleni Gabre-Madhin

Non-executive Director. Member of the Corporate Responsibility Committee

Born: 1964. Nationality: Swiss.  
Initial appointment: 2013.



### Jacques Vincent

Non-executive Director. Member of the Compensation Committee

Born: 1946. Nationality: French.  
Initial appointment: 2005.



### Michael Mack

Chief Executive Officer (CEO), executive Director. Member of the Chairman's & Governance Committee and the Corporate Responsibility Committee

Born: 1960. Nationality: American.  
Initial appointment: 2008.



### Stefan Borgas

Non-executive Director. Member of the Audit Committee

Born: 1964. Nationality: German.  
Initial appointment: 2009.



### David Lawrence

Non-executive Director. Member of the Audit Committee and Chairman of the Science and Technology Advisory Board

Born: 1949. Nationality: British.  
Initial appointment: 2009.

## Executive Committee

at December 31, 2014

Under the leadership of the Chief Executive Officer (CEO), the Executive Committee is responsible for the active leadership and the operative management of the Company. It consists of the CEO, the Chief Operating Officer (COO) EAME & Latin America, the Chief Operating Officer (COO) APAC & North America, the Chief Financial Officer (CFO), the Head Research & Development, the Head Global Operations, the Head Legal & Taxes, the Head Human Resources and the Head Corporate Affairs.



**Michael Mack**

Chief Executive Officer (CEO), executive Director. Member of the Chairman's & Governance Committee and the Corporate Responsibility Committee  
Born: 1960. Nationality: American.  
Appointed: 2008.



**John Atkin**

Chief Operating Officer  
Born: 1953. Nationality: British.  
Appointed: 2000.



**Caroline Luscombe**

Head Human Resources  
Born: 1960. Nationality: British.  
Appointed: 2012.



**Christoph Mäder**

Head Legal & Taxes and Company Secretary  
Born: 1959. Nationality: Swiss.  
Appointed: 2000.



**Patricia Malarkey**

Head Research & Development  
Born: 1965. Nationality: British/American.  
Appointed: 2014.



**Mark Peacock**

Head Global Operations  
Born: 1961. Nationality: British.  
Appointed: 2007.



**Davor Pisk**

Chief Operating Officer  
Born: 1958. Nationality: British.  
Appointed: 2008.



**John Ramsay**

Chief Financial Officer  
Born: 1957. Nationality: British.  
Appointed: 2007.



**Jonathan Seabrook**

Head Corporate Affairs  
Born: 1969. Nationality: British.  
Appointed: 2013.



Read full biographies:  
Corporate Governance Report and  
Compensation Report on **pages 06–09** and **13–14**



## Shareholder information

## Shareholder information

Syngenta shares are listed on the SIX Swiss Exchange and on the New York Stock Exchange, where the shares are traded as ADS (American Depositary Shares).<sup>1</sup>

## Trading symbols

	SIX Swiss Exchange	New York Stock Exchange
Shares	SYNN	SYT

## Shares in issue

At December 31, 2014	Number of shares
Total shares in issue	92,945,649
of which treasury shares	1,286,312

Share price and market capitalization<sup>2</sup>

At December 31, 2014

Share price (CHF)	320.00
Share price (\$) (ADS)	64.24
Market capitalization (CHF million)	29,331
Market capitalization (\$ million)	29,654

## Dividend history

	CHF
2010	7.00
2011	8.00
2012	9.50
2013	10.00
2014 <sup>3</sup>	11.00

<sup>1</sup> 1 share = 5 ADS

<sup>2</sup> For the purposes of calculating market capitalization the number of shares stood at 91.7 million

<sup>3</sup> To be submitted to shareholders for approval at the Annual General Meeting on April 28, 2015

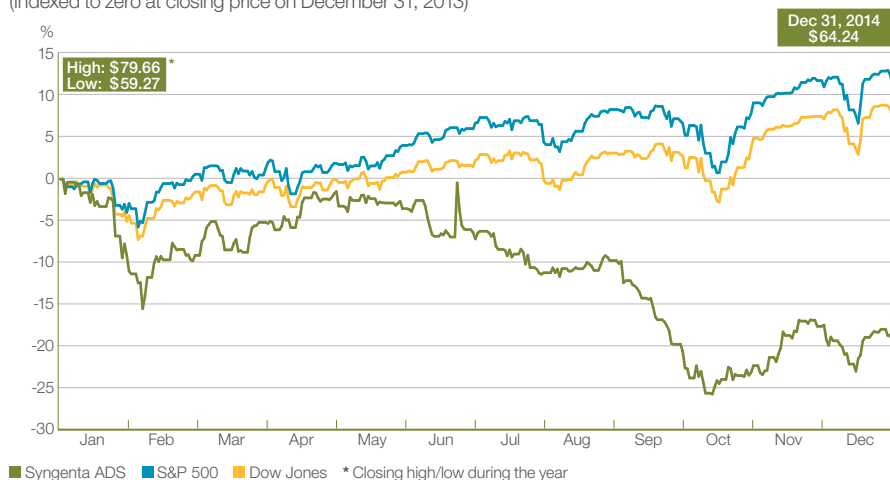
## Syngenta share price performance January 1, 2014 – December 31, 2014

(Indexed to zero at closing price on December 31, 2013)



## Syngenta ADS price performance January 1, 2014 – December 31, 2014

(Indexed to zero at closing price on December 31, 2013)



## Reporting dates

First quarter trading statement	April 17, 2015
Annual General Meeting	April 28, 2015
Half-year results	July 23, 2015
Third quarter trading statement	October 15, 2015

A full form 20-F is accessible at: [www.syngenta.com/ir](http://www.syngenta.com/ir)  
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The full year results press release can be viewed up to six months after the event at:  
[www.syngenta.com/fyr-2014](http://www.syngenta.com/fyr-2014)

## Syngenta share price performance January 1, 2010 – December 31, 2014

(Indexed to zero at closing price on December 31, 2009)

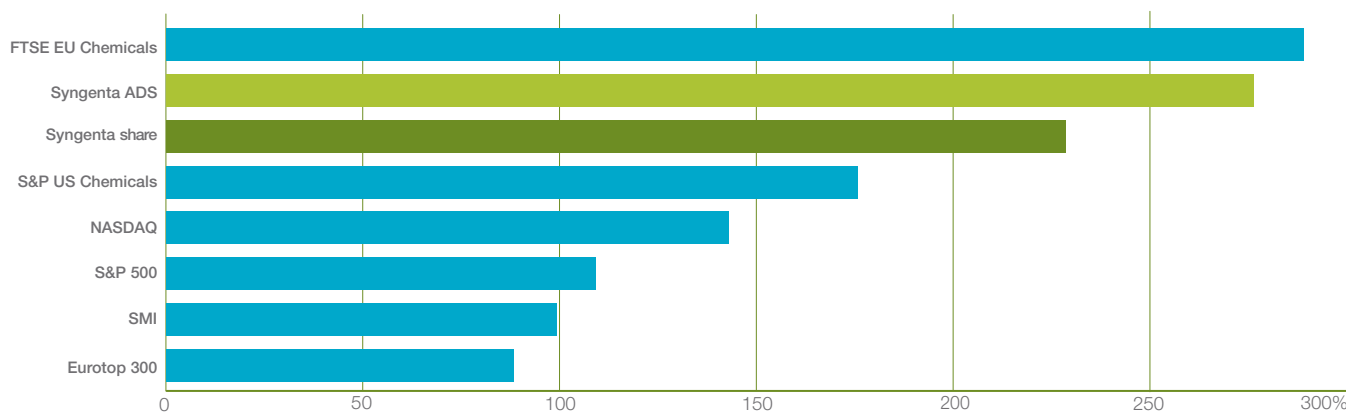


## Syngenta ADS price performance January 1, 2010 – December 31, 2014

(Indexed to zero at closing price on December 31, 2009)



## Total shareholder return<sup>1</sup> January 1, 2005 – December 31, 2014



<sup>1</sup> Share price appreciation plus reinvested dividends, indexed to closing price on December 31, 2004

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For the business year 2014, Syngenta has published three books: the Annual Review 2014 (including information about our non-financial performance), the Financial Report 2014, and the Corporate Governance Report and Compensation Report 2014.

All documents were originally published in English. The Annual Review 2014 and the Corporate Governance Report and Compensation Report 2014 are also available in German.

These publications are also available on the Internet: [www.syngenta.com](http://www.syngenta.com)

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We refer you to Syngenta's publicly available filings with the US Securities and Exchange Commission for information about these and other risks and uncertainties. Syngenta assumes no obligation to update forward-looking statements to reflect actual results, changed assumptions or other factors.

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Article number 017220.040

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